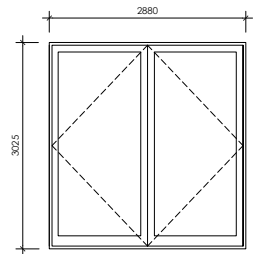


1 Typical Glazing to Wall Panel  
Isometric Detail at Midfloor

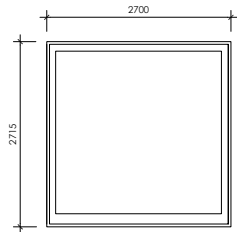
RELEASED UNDER THE OFFICIAL INFORMATION ACT

LOCAL AUTHORITY
CONSULTANTS
NOTES:
<p>C 23-08-2017</p> <p>B 28-02-2017</p>
REVISION HISTORY:
s 9(2)(a)
<p>PROJECT: No: 201504</p> <p><b>ISLAND BAY ROAD HOUSE</b></p> <p>6 Island Bay Road, Beach Haven</p>
<p>SHEET:</p> <p><b>Typical Glazing Details - Sheet 2</b></p>
<p>SCALES @ A2:</p> <p>SCALES @ A4: Half A2 scale</p>
<p>REF:</p> <p>DRAWN/START DATE: Author</p>
<p>DRWG No: <b>A4-203</b> REVISION: <b>C</b></p>
<p>DO NOT SCALE CONTRACTOR MUST VERIFY ALL DIMENSIONS ON SITE BEFORE COMMENCING WORK</p>
<p>COPYRIGHT © s 9(2)(a)</p> <p>23-Aug-17 12:11:56 PM</p>

CONSTRUCTION



DOOR 1 DESCRIPTION  
Aluminum framed double glazed double 1440 wide doors as shown.



DOOR 2 & 3 DESCRIPTION  
Aluminum framed double glazed 2700 wide sliding doors as shown.

general notes:

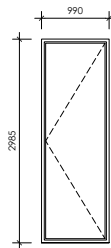
Refer to the floor plans and elevations for the door locations.  
"F" framed window dimensions shown are over the frame and "U" glazing unit dimensions shown are over the unit.  
All glazing units are low E double glazed glazing units.  
All windows and doors are elevated from the outside.  
All doors windows and glazing units are to be site measured before manufacture.  
All glass is to be clear float glass.

glazing notes:

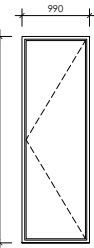
Safety glass is to be provided to all doors and windows as required by Building Code Clause F2 Hazardous Building Materials, and in accordance with NZS 4223: Part 3: 1999 Glazing in Buildings - Human Impact Safety Requirements  
All glazing to the dwelling to comply with NZS 4223 parts 1, 2 and 3

D1 1 off  
door elevations Scale 1:50

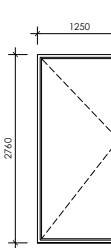
D2 & D3 1 off each



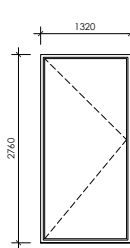
F1, F2 & F3 1 off each



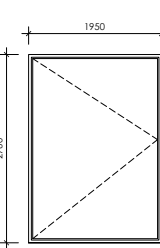
F4 1 off



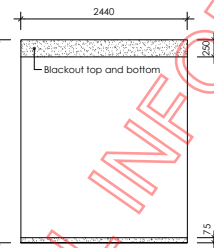
F5 1 off



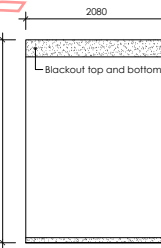
F6 & F7 1 off each



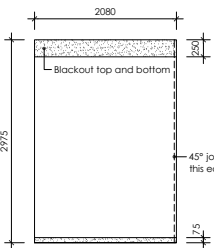
F8 & F9 1 off each



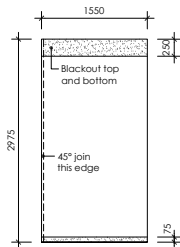
U1 1 off



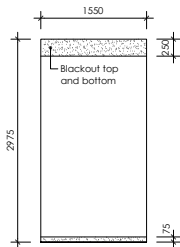
U2 1 off



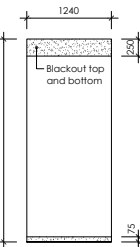
U3 1 off



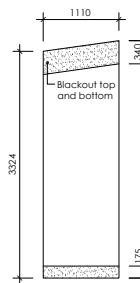
U4 1 off



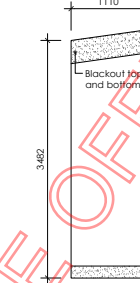
U5 1 off



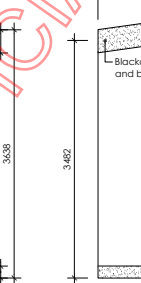
U6 1 off



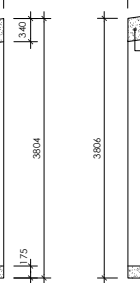
U7 1 off



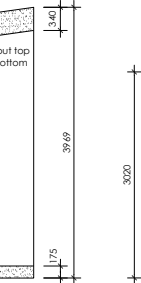
U8 1 off



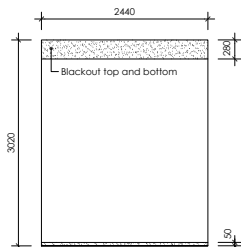
U9 1 off



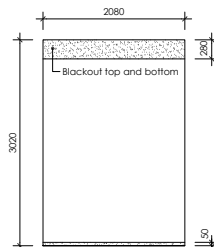
U10 1 off



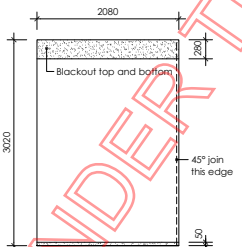
U11 & U13 1 off each



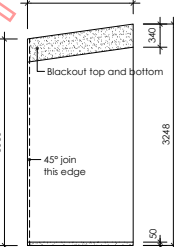
U12 1 off



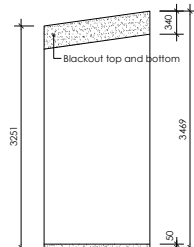
U14 1 off



U15 1 off



U16 1 off



U17 1 off

U12 1 off  
U14 1 off  
U15 1 off  
U16 1 off  
U17 1 off  
window elevations Scale 1:50 @ A2

LOCAL AUTHORITY:  
AUCKLAND CITY COUNCIL

CONSULTANT:  
S 9(2) /  
S 9(2) /  
S 9(2) /  
PO Box 71 065 Rosebank Road  
ph (09) 8200131  
cell

NOTES:

REVISION HISTORY:

s 9(2)(a)

PROJECT: No: 201504

ISLAND BAY ROAD HOUSE

6 Island Bay Road  
Beach Haven  
AUCKLAND

SHEET:  
DOOR AND WINDOW ELEVATIONS

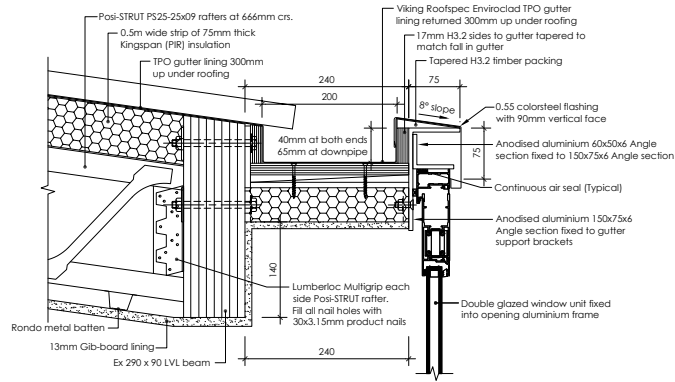
SCALES @ A2:  
SCALES @ A4: Half A2 scale

REF:  
DRAWN/START DATE: Author

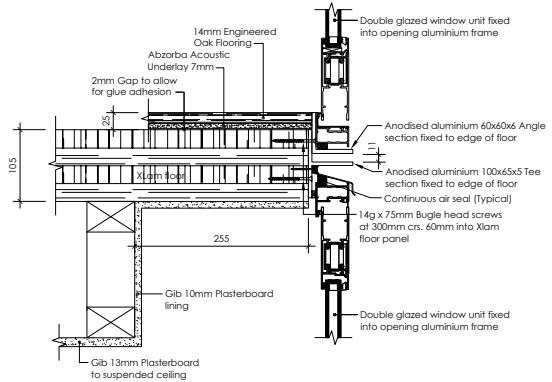
DRWG No: REVISION:  
S-16

DO NOT SCALE  
CONTRACTOR MUST VERIFY ALL DIMENSIONS ON SITE BEFORE COMMENCING WORK

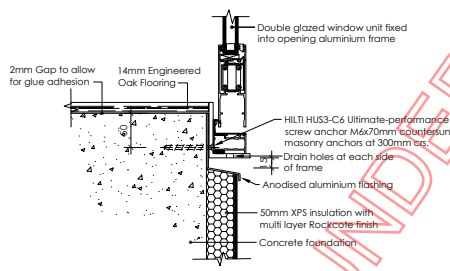
COPYRIGHT © S 9(2)(a)



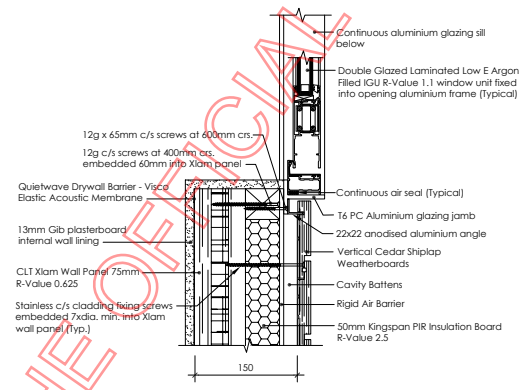
ROOF LEVEL  
EAVE/GUTTER DETAIL @ WINDOW



FIRST FLOOR  
WINDOW ABOVE AND BELOW



GROUND FLOOR @ WINDOW



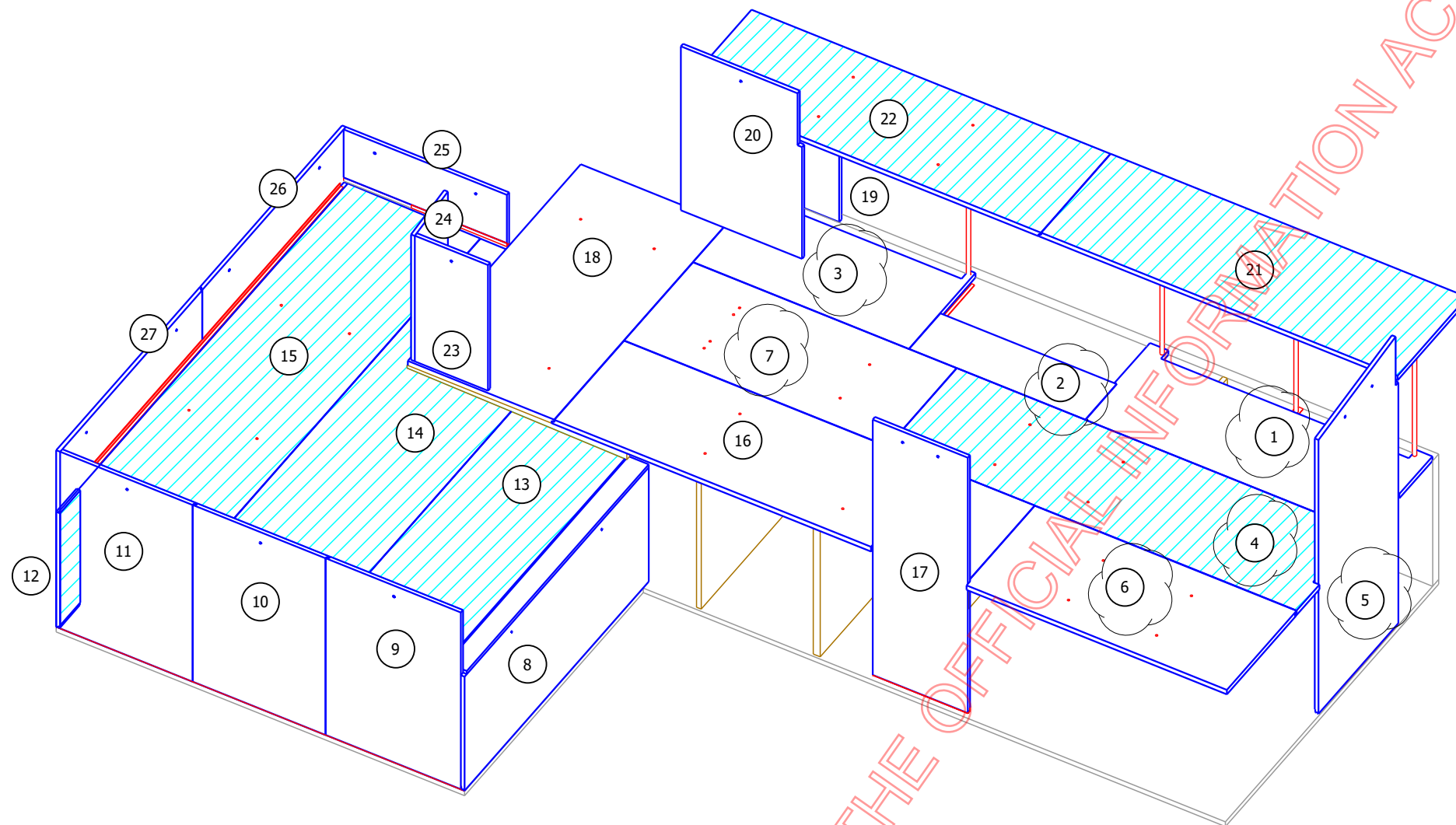
WALL/WINDOW JAMB JUNCTION

TYPICAL OPENING WINDOW DETAILS Scale 1:5 @ A2

LOCAL AUTHORITY: <b>AUCKLAND CITY COUNCIL</b>	
CONSULTANT: <b>s 9(2)(a)</b> Siskind Gunn & Partners Ltd PO Box 71 065 Rosebank Road ph (08) 8200131 cell	
NOTES:	
REVISION HISTORY:	
s 9(2)(a)	
PROJECT: No: 201504	<b>ISLAND BAY ROAD HOUSE</b>
6 Island Bay Road Beach Haven AUCKLAND	
SHEET: <b>OPENING WINDOW DETAILS</b>	
SCALES @ A2:	SCALES @ A4: Half A2 scale
REF:	DRAWN/START DATE: <b>Author</b>
DRWG No:	REVISION:
<b>S-17</b>	
DO NOT SCALE CONTRACTOR MUST VERIFY ALL DIMENSIONS ON SITE BEFORE COMMENCING WORK	
COPYRIGHT © <b>s 9(2)(a)</b>	



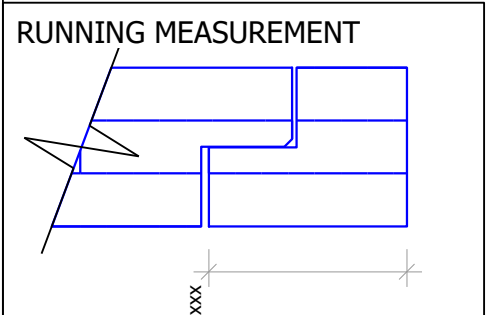
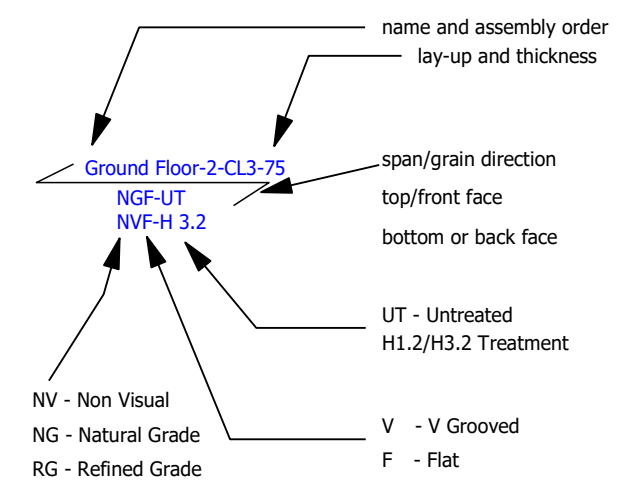




P1 Pictorial of assembly  
XL001 nts

**KEY**

- slope direction
- set up point lower position
- typical CLT lap joint
- H3.2 treated area (all layers)
- openings
- timber framing
- support and other structural components provided by others
- Pre-slung lifting holes
- Installation sequence
- Fixing Type, see table on cover sheet



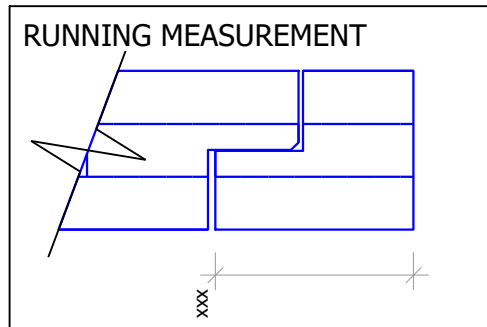
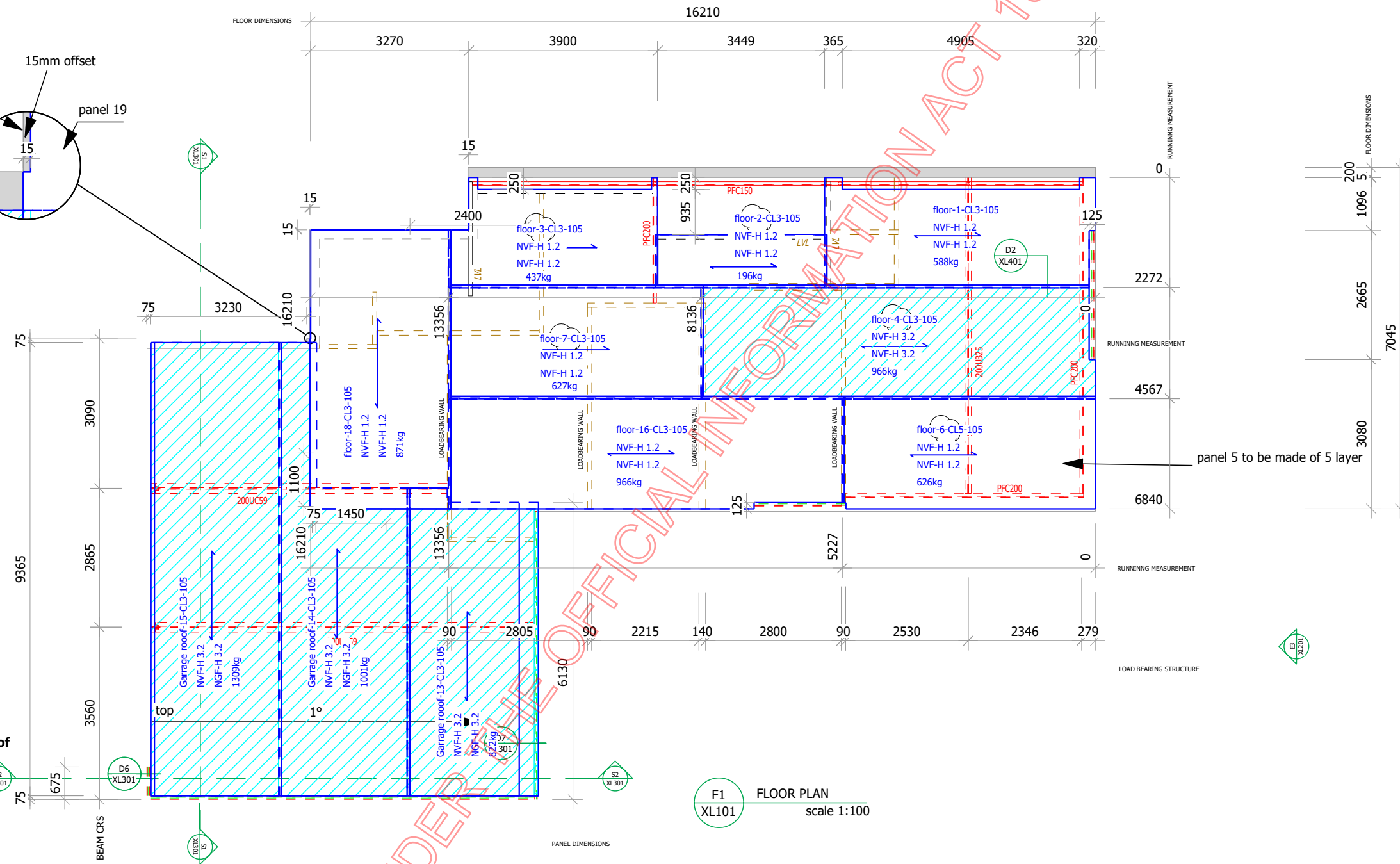
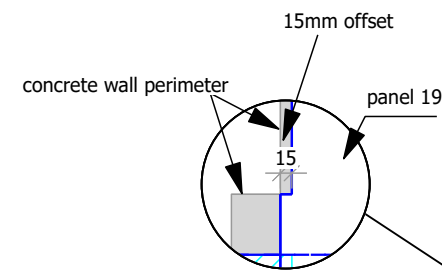
**NOTE:**  
A -3MM TOLERANCE HAS BEEN ALLOWED AT ALL PANEL JOINTS.  
REFER TO RUNNING MEASUREMENT WHEN PLACING PANELS.

Revision	Date	Modification
A	5/4/2017	Assembly amended
B	7/4/2017	panel 2 and 7 merged, assembly adjusted accordingly
C	7/4/2017	installation sequence changed

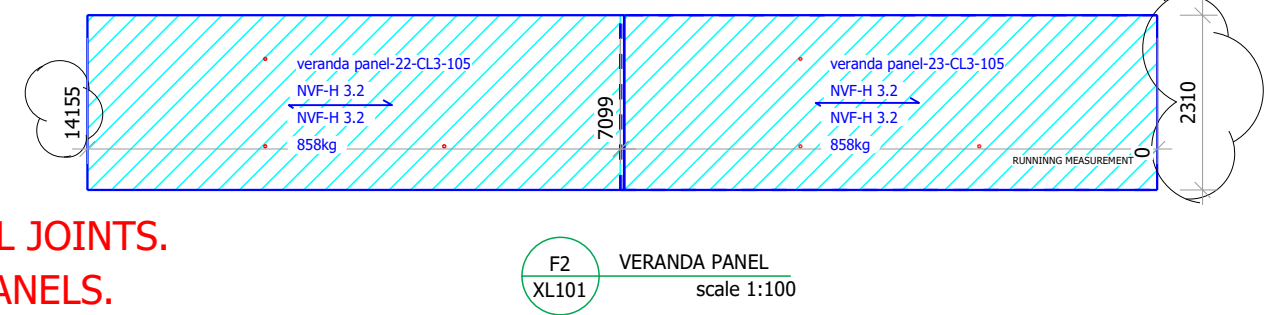
**XLam**  
XLam NZ Ltd  
57 Beatty St  
Tahunanui  
Nelson NZ 7011  
03 538 0930  
info@xlam.co.nz

**Project:** 6 Island Bay Rd  
**Client:** s 9(2)(a)

<b>PICTORIAL VIEW</b>					
<b>FOR CONSTRUCTION</b>					
nts	DRW: JP - PR: JL	job no: N1561	date: 7/4/2017	rev. : B	sheet no: XL 001



**NOTE:**  
A -3MM TOLERANCE HAS BEEN ALLOWED AT ALL PANEL JOINTS.  
REFER TO RUNNING MEASUREMENT WHEN PLACING PANELS.

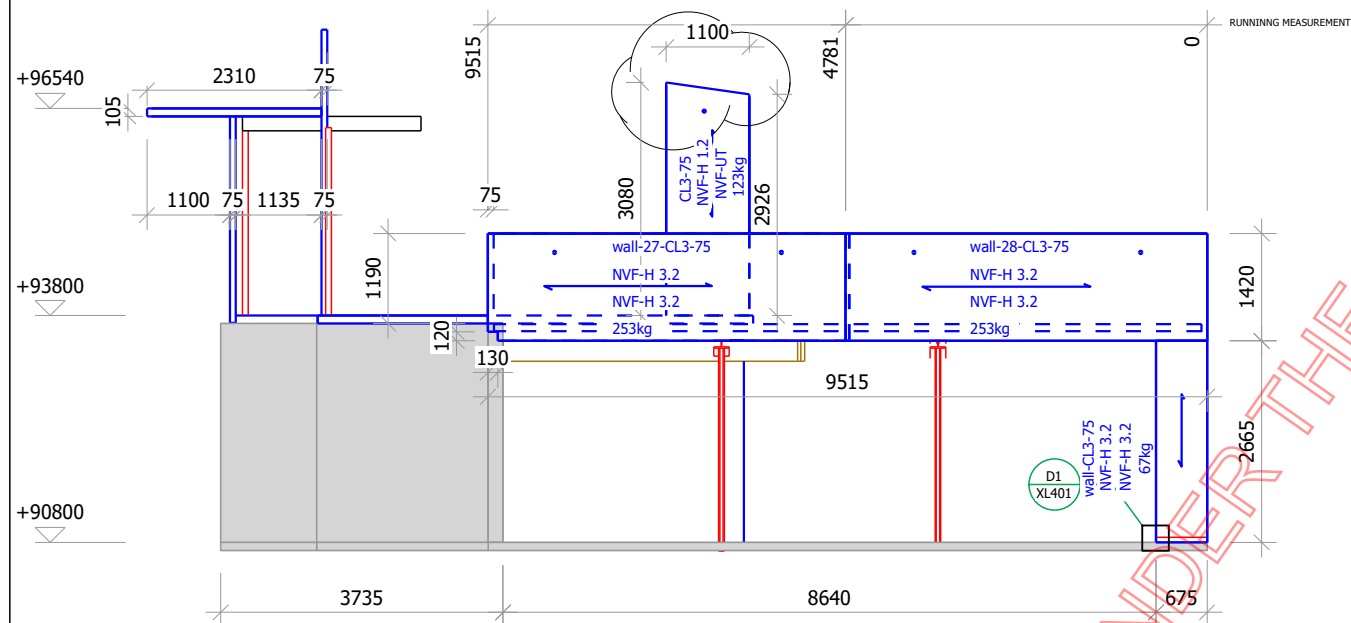
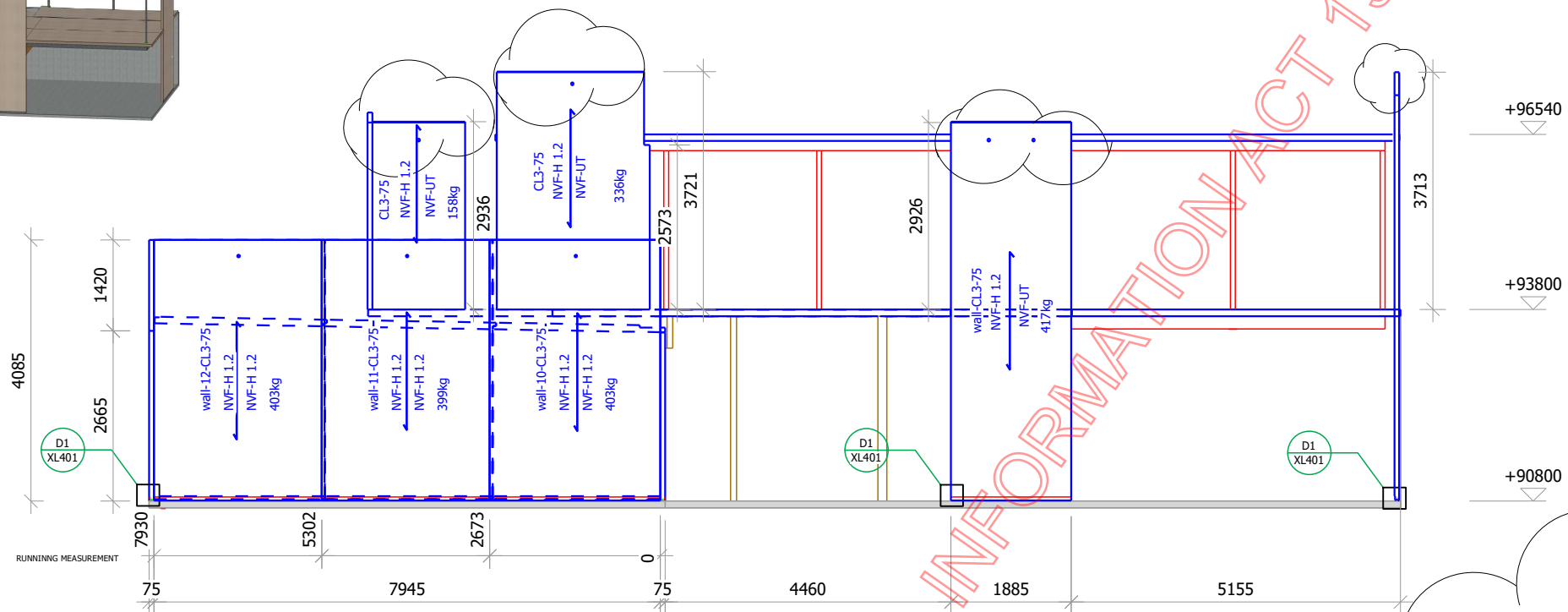
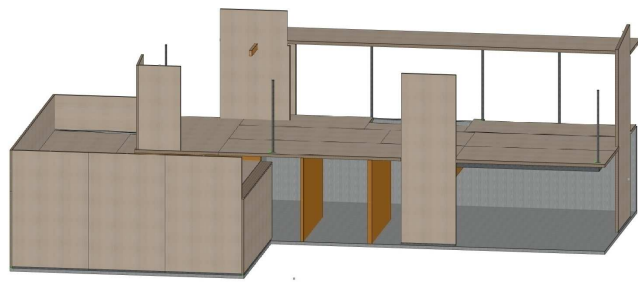


Revision	Date	Modification
A	5/4/2017	treatment a dims adjusted
B	7/4/2017	panel 2 and 7 merged, assembly adjusted accordingly
C	7/4/2017	panel 5 to be made of 5 layer installation sequence changed

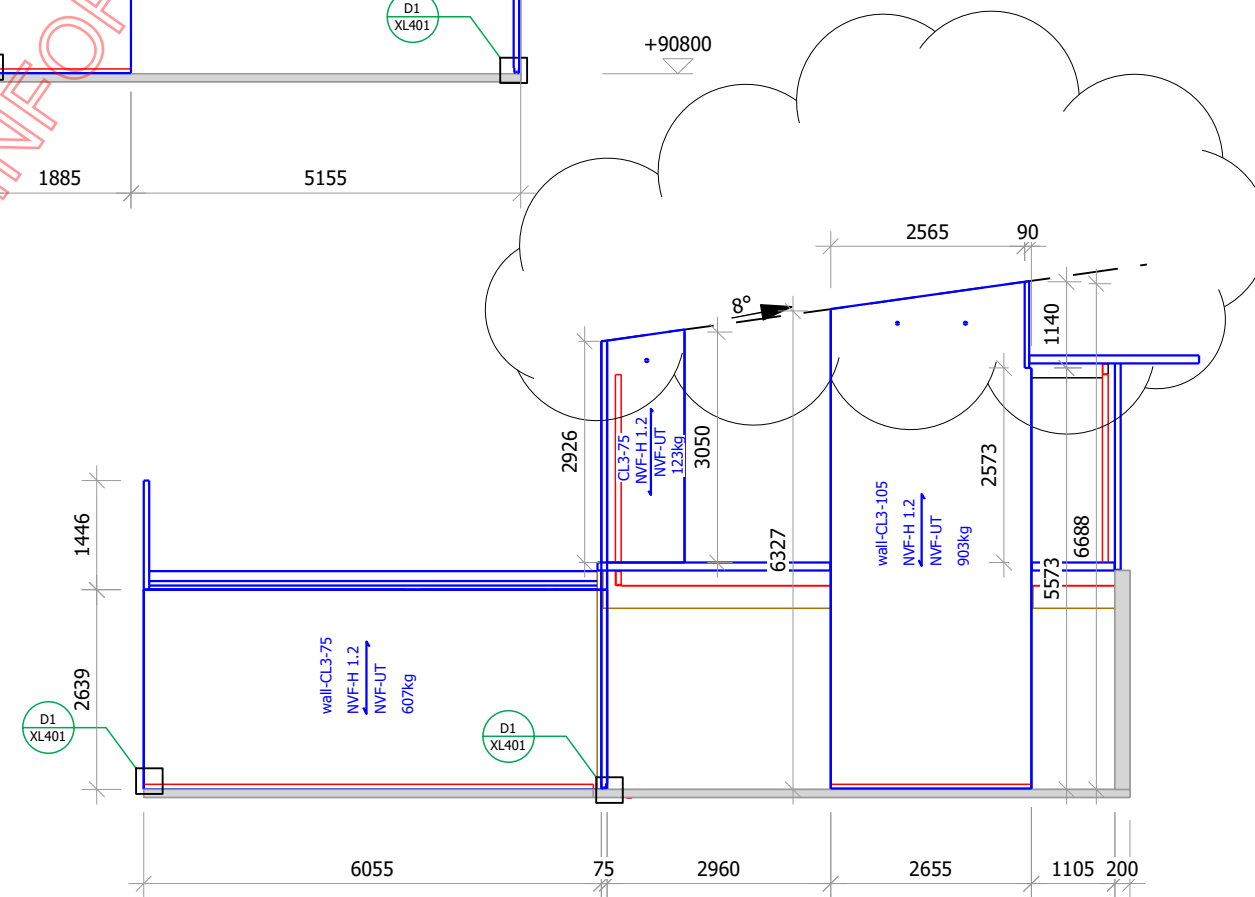
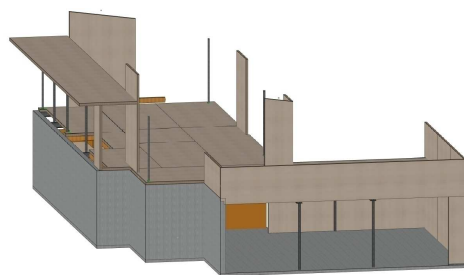


Project: **6 Island Bay Rd**  
Client: s 9(2)(a)

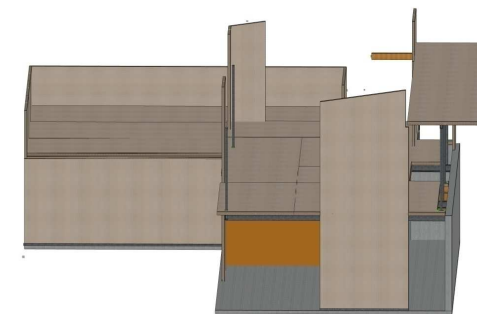
**FLOOR PLAN**  
**FOR CONSTRUCTION**  
@A3 1:100 uno | DRW: JP - PR: JL | job no: N1561 | date: 7/4/2017 | rev.: B | sheet no: XL 101



E2 ELEVATION E2 scale 1:100 XL101



E3 ELEVATION E3 scale 1:100 XL101



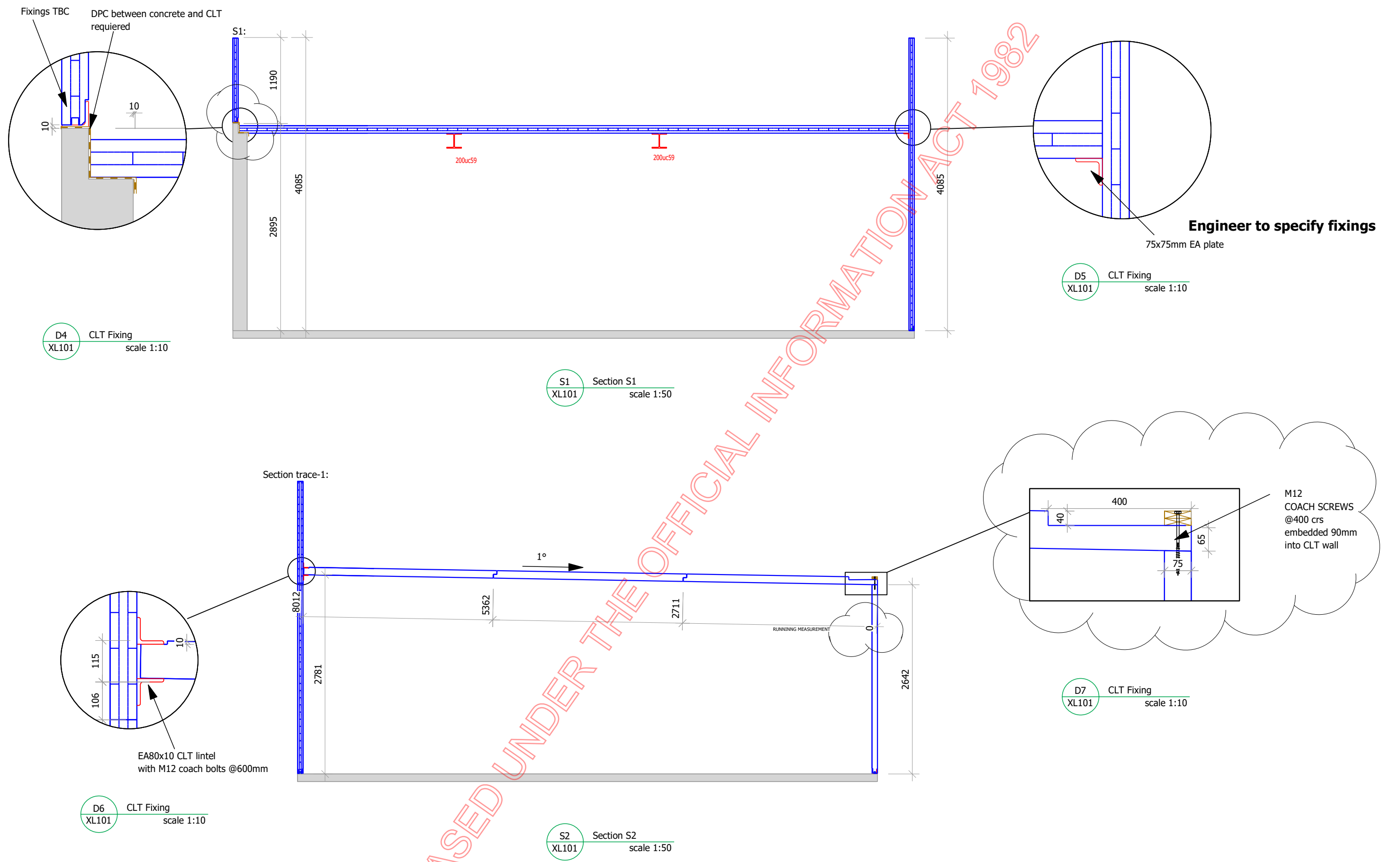
Revision	Date	Modification
A	5/4/2017	veranda panel and balustrade amended
B	5/4/2017	wall panel 9 at garage shifted by 15mm panel 10 and 14 stretched accordingly
C	6/4/2017	wall panels height modified to mach angle of 8°

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 03 538 0930  
 info@xlam.co.nz

Project: **6 Island Bay Rd**  
 Client: s 9(2)(a)

ELEVATION E1/E2/E3

FOR CONSTRUCTION

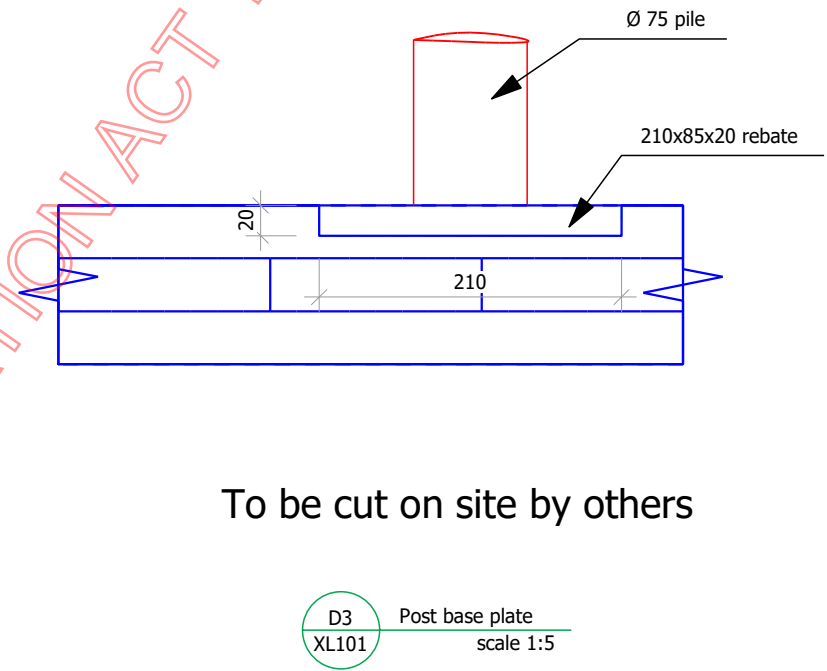
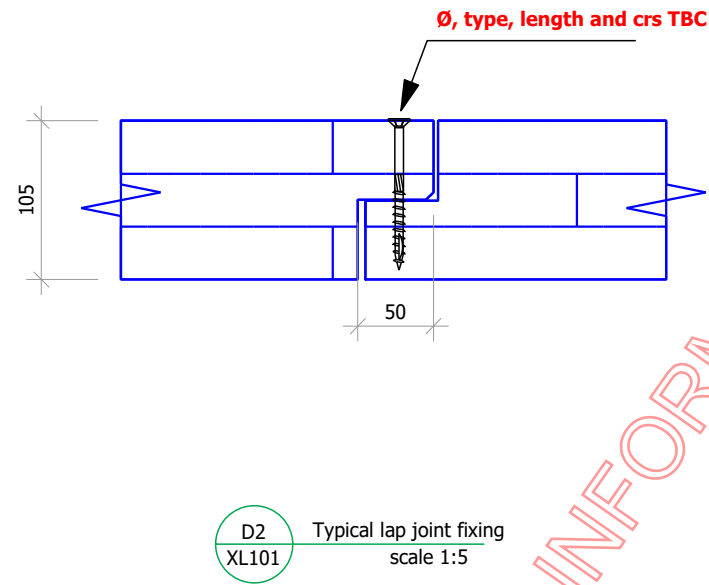
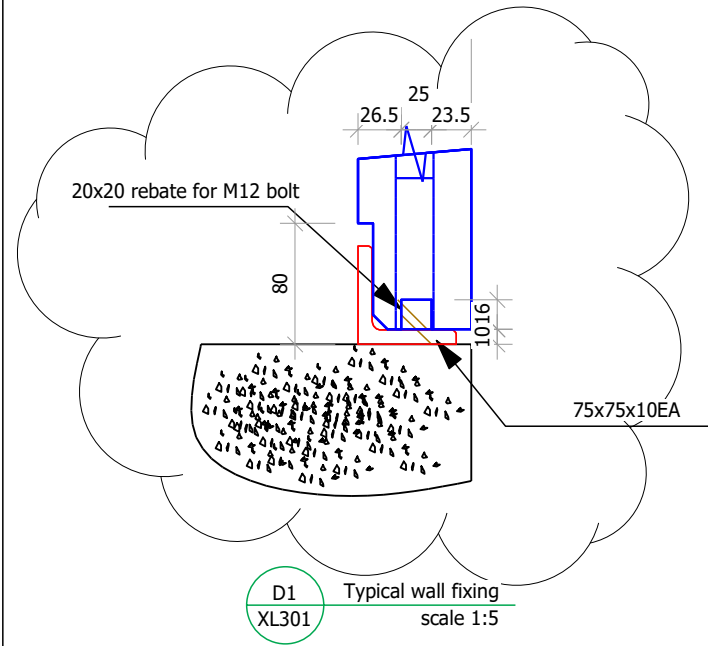


Revision	Date	Modification
A	5/4/2017	Details modified
B	5/4/2017	wall panel 9 at garage shifted by 15mm panel 10 and 14 stretched accordingly

**XLam**  
 XLam NZ Ltd  
 57 Beatty St  
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 info@xlam.co.nz

**Project:** 6 Island Bay Rd  
**Client:** s 9(2)(a)

**CROSS-SECTION**  
**FOR CONSTRUCTION**  
 @A3 1:50 uno | DRW: JP - PR: JL | job no: N1561 | date: 7/4/2017 | rev.: B | sheet no: XL 301



Revision	Date	Modification
A	5/4/2017	Details modified
B	5/4/2017	Rebate for M12 adjusted

**XLam**

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57 Beatty St  
Tahunanui  
Nelson NZ 7011  
03 538 0930  
info@xlam.co.nz

Project: **6 Island Bay Rd**

Client: s 9(2)(a)

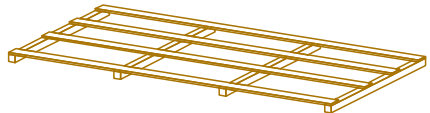
DETAILS

FOR CONSTRUCTION

@A3 1:5 uno | DRW: JP - PR: JL | job no: N1561 | date: 7/4/2017 | rev. : B | sheet no: XL 401



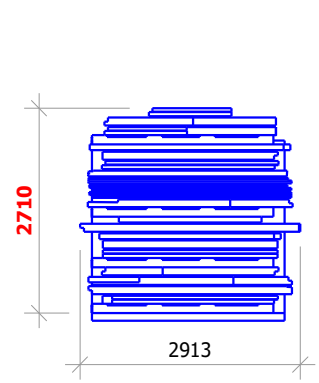
All packs wrapped in XLam protective and strapped to pallets



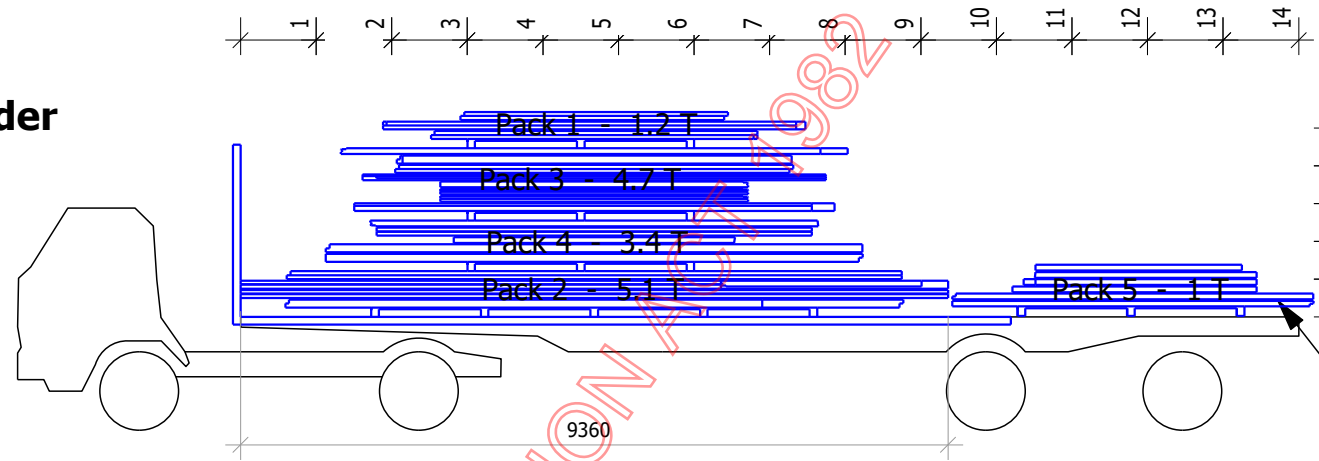
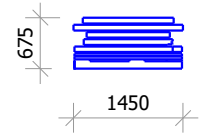
**Plugs to be included:**  
 Untreated:  
 H1.2: 80  
 H3.2: 65

**Trucking Company: Freightlines**  
 Completely tarped: yes  
 Driver's cell number: \_\_\_\_\_  
 Variation to loading:

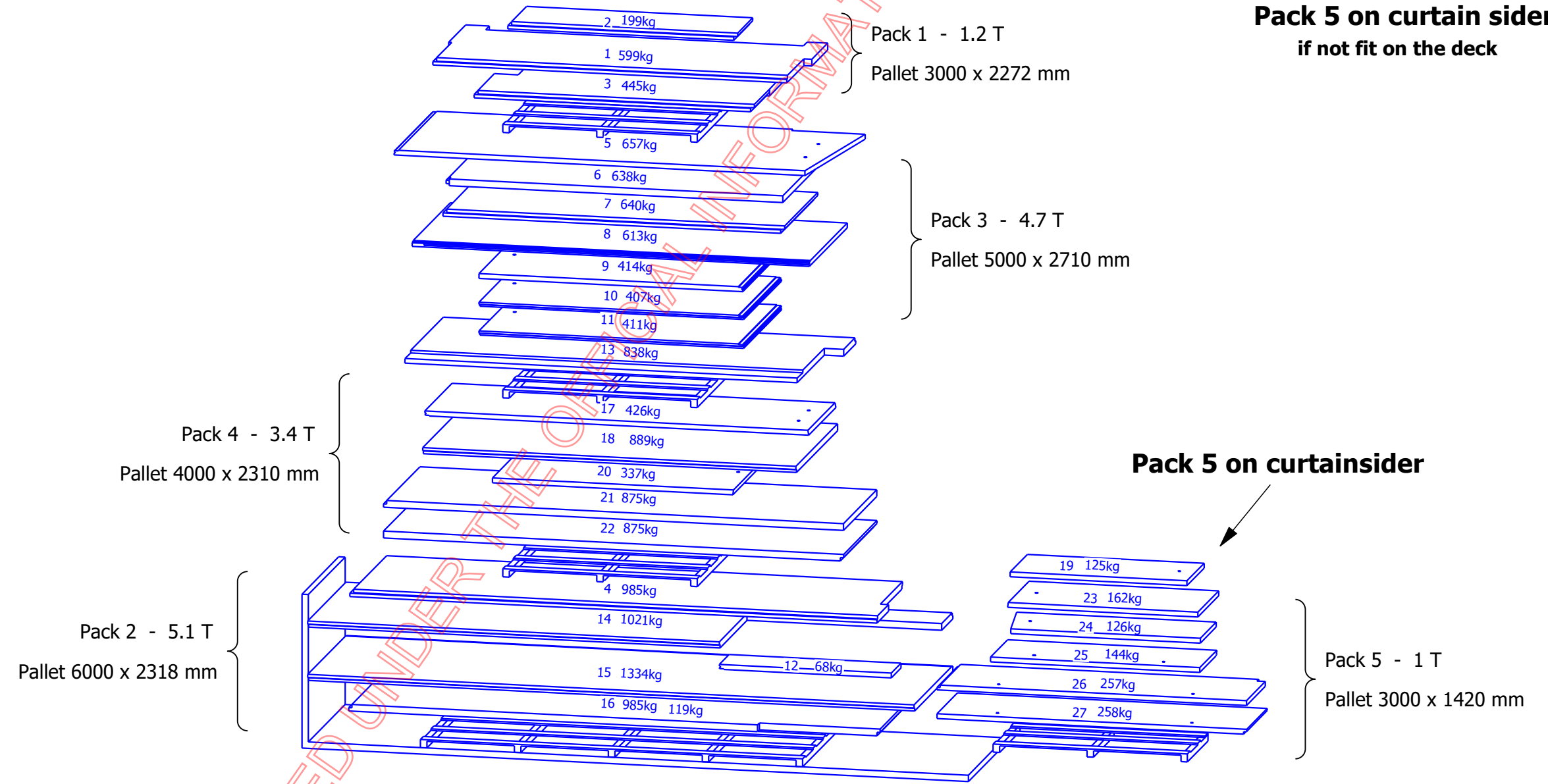
**Total weight:** 15 T  
**Total volume:** 81 m<sup>3</sup>



**Pack 5 on curtainsider**



**Pack 5 on curtain sider if not fit on the deck**



**Loading:** 18/4/2017 | **ETA:** 20/4/2017 at 8:00 AM  
**Site address:** 6 Island Bay Rd, Auckland  
**Contact:** Corban Walls | **Tel:** § 9(2)(a)

Delivery 1 off 1

**Real XLam volume:** 29.3 m<sup>3</sup>

# Insulated Roof & Wall Panels

# KS1000 RW Data Sheet



Trapezoidal Roof and Wall Panels





# KS1000 RW Technical Data

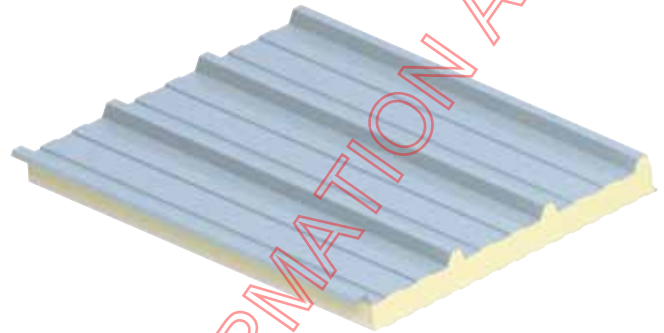
## Product Overview

Kingspan roof and wall panel systems present a superior system compared to conventional multi-part site assembled systems. They are quicker to install, require less manual labour and provide guaranteed thermal performance. The Trapezoidal roof and wall panel (KS1000 RW) is a through fixed system which can be used for building applications with roof slopes of 4° and above in both vertical and horizontal wall applications.

Alternative specifications are available for lower pitches, low temperature and high humidity environments, contact Kingspan Technical Services to discuss your requirements.

## Application

The Kingspan Trapezoidal roof and wall panel system is suitable for most new build and refurbishment building applications as a roof and wall element. The steel exterior and interior lining is available in a range of coatings and colours for standard, coastal and high humidity environments.



## Manufacture

Panels are manufactured in a Kingspan owned facility in Sydney, Australia. Lead times are typically 4-5 weeks for stocked coatings and colours. Non stocked coatings/colours require extra lead time.

## Panel Performance

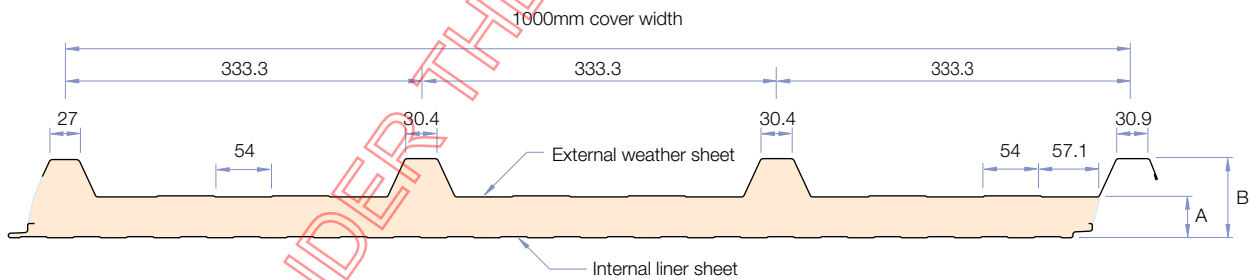
### Panel Properties and Thermal Performance

A - Core Thickness (mm)	40	60	70	100
B - Overall Dimension (mm)	75	95	105	135
R Value (m <sup>2</sup> K/W)	2.34	3.36	3.87	5.35
Weight kg/m <sup>2</sup> 0.5/0.4 steel	10.30	10.70	11.10	12.30

## Available Lengths

Standard lengths are from 2m to 11.8m including endlap/gutter cutback. (Eg. 11.65m + 0.15m lap).

Factory made cutbacks are available in 0.075m or 0.150m.



# KS1000 RW Technical Data

## NZBC Compliance

The KS1000 RW panel has been used around New Zealand, on many building types for in excess of 10 years.

We are pleased to be the first insulated panel on the New Zealand marketplace to be Codemark certified (SAIG-CM20104).



When designed, used, installed and maintained in accordance with Kingspan standard details, the KS1000 RW panel is compliant with the following clauses on the NZBC:

- B1 Structure
- B2 Durability
- C3 Spread of fire
- E2 External Moisture
- H1 Energy Efficiency

## Fire Performance

The KS1000 RW panel has been rigorously tested to both NZ and international building standards and the standards expected of the insurance industry.

### Internal Surface Finish (NZBC C.4.17.1)

Standard Details	Firewall Details
Group 2S	Group 1S

### External Radiation (NZBC C.5.8)

Total Heat THRR	Peak Heat PHRR	>1m from boundary	<1m from boundary
5 mJ/m <sup>2</sup>	24 kW/m <sup>2</sup>	✓	✓

### Foam Plastic Core (NZBC C.4.17.2)

Core meets the requirements of AS 1366

## Westmere College, Auckland

- New build · Roof: KS1000 RW · Wall: KS1000 RW



## Sprinkler Code NZS 4541:2007

The Sprinkler Standard NZS 4541:2007 contains levels of sprinkler protection required for buildings constructed with "Approved" and "Not Approved" panels - refer to section 212 and Appendix J.

Kingspan PIR panels are classed as "Approved" as they have FM Global approval.



masterspec

## Firewall

Various tested Firewall solutions are available. All of these solutions require a specific construction to match the tested performance. Contact Kingspan with your specific requirements and we will provide an appropriate solution.

## Insurance

Kingspan panels have achieved FM Global

- FM4880 Class 1 - unlimited height (the highest classification available)
- FM4881 - External Wall System - no height restriction
- FM4771 - External Roof

## Acoustic Performance

For sound transmission reduction, Kingspan panels typically have a single figure weighted sound reduction index (SRI) of Rw=24dB. For New Zealand specific acoustic solutions contact Kingspan Technical Services.

Frequency (Hz)	125	250	500	1000	2000	4000	Rw
SRI (dB)	17	21	26	26	26	42	24

## Remarkables Ski Field, Queenstown

- New build · Roof: KS1000 RW · Wall: KS1000 RW



# KS1000 RW

## Technical Data

### Materials

#### Exterior Weather Sheet

- 0.5mm thick Zinalume G300S AZ150/200 or AM100/150 coated steel to AS1397
- Colours as per the Kingspan Australian colour guide available in hard copy and on the website

#### Insulation Core

- Polyisocyanurate (PIR), with zero Ozone Depletion Potential (Zero ODP). Available in FM Global insurer approved FIREsafe certified product range.
- PIR foam is a thermosetting material. It does not melt, flow or drip when exposed to fire. It will form a strong char that helps protect the foam core and prevent flame spread within the panels.

#### Internal Liner Sheet

- 0.4mm thick Zinalume G300S AZ100 coated steel to AS1397
- Rib Profile
- Colour: Standard White Liner
  - other colours available on extended lead time and price
  - AQUAsafe (White) stocked in limited quantities for High Humidity Environments

#### Ancillaries

Kingspan also provides daylighting systems, profiled foam closers, butyl tapes, insulated gutters, and other ancillary items.

#### Product Selection Assistance

Sales representatives are available nationwide to answer queries on product options, assist with detailing, spans, colour swatches and other queries. They can also provide early stage budget estimates and co-ordinate the provision of project specifications.

#### Technical Assistance

Our technical team is available to provide specific advice on panel spans, product specifications, standard and bespoke detailing, panel optimisation, fire wall options, project specific acoustic solutions, panel guarantees, thermal condensation risk calculation along with general building science cladding advice.

Kingspan Technical Services can provide 'side by side' assistance with regard to project detailing, attending design meetings, providing training and undertaking site visits when required.

### Guarantees

Kingspan will provide product guarantees on an individual project basis.

Guarantees are typically up to 15 years in a non marine / geothermal environment. All guarantees are subject to a maintenance regime. Specialist coatings are available for marine and other more corrosive areas.

### Environmental

Kingspan Insulated Panels Australian manufactured products have achieved a GreenTagCert™ Gold Plus certification with a GreenRate® Level A. Kingspan was the first insulated panel manufacturer to receive this globally respected third party certification which allows specifiers to easily achieve points for both the Green Building Councils of Australia and New Zealand under the Green Star® programs. Full Green Tag certificates are available at [www.kingspanpanels.co.nz](http://www.kingspanpanels.co.nz)



Kingspan has undertaken a Life Cycle assessment of the KS1000 RW panels, and have published an Environmental Product Declaration (EPD) on their performance. The result shows that the Australian made panels are consistent with the Green Guide A+ rating achieved by the UK sourced materials.

### Biological

Kingspan panels are normally immune to attack from mould, fungi, mildew, and vermin. No urea or formaldehyde is used in the construction, and the panels are not considered deleterious to health.

### Quality and Durability

KS1000 RW trapezoidal panels are manufactured to ISO 9001 standards from the highest quality materials, using state of the art production equipment to rigorous quality control standards, ensuring long term reliability and service life.

### Delivery & Packing

#### Standard Packing

Protective film is applied to the external face.

Kingspan roof panels are stacked horizontally (weather sheet to weather sheet minimise pack height).

The number of panels in each pack depends on panel thickness.

#### Delivery

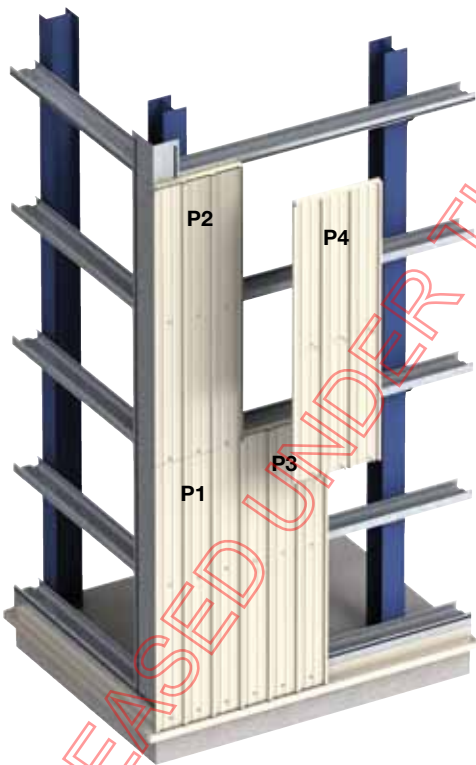
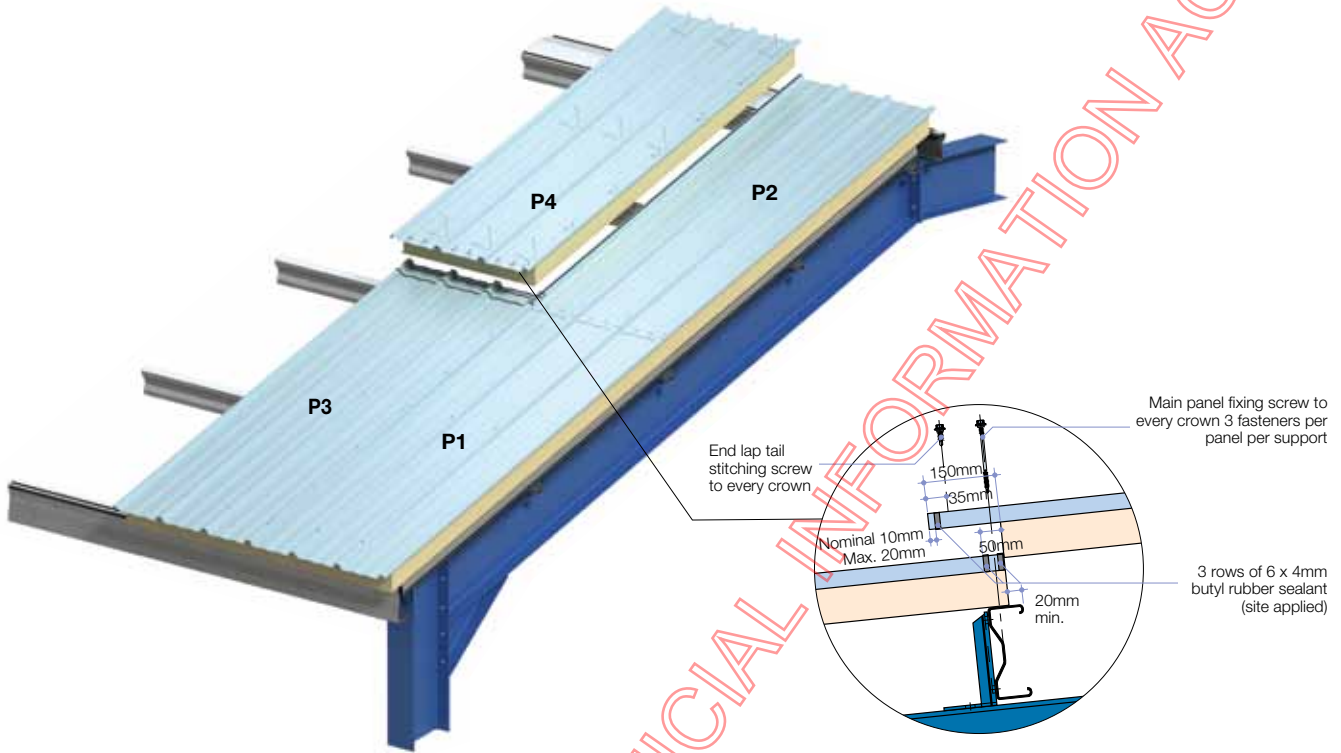
All deliveries (unless indicated otherwise) are by road transport to project site by flat bed truck for off loading by crane or fork hoist. Off loading is the responsibility of the installer.

Handling guidelines are available from Kingspan Technical Services.

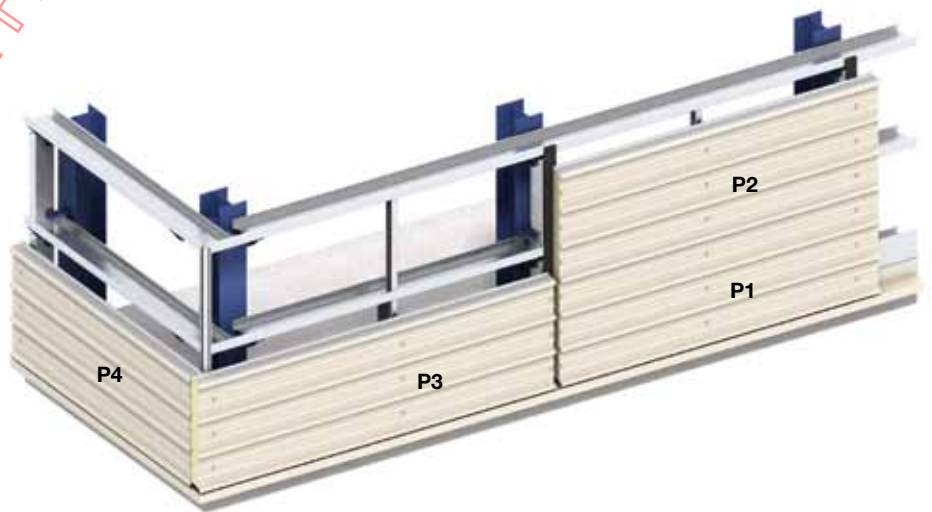
#### Site Installation Procedure

A site assembly instruction brochure is available from Kingspan Technical Services.

# Installation



Vertical Wall



Horizontal Wall



# KS1000 RW Roof Span Tables

## Roof Span Tables

Span capability of composite systems can depend on a number of external factors. The following table is based on typical light colour selections. For darker colours contact Kingspan Technical Services.

### Single Span Condition



Panel Thickness mm	Load Type	Span L in metres								
		1.8	2.2	2.6	3.0	3.4	3.8	4.2	4.6	5.0
<b>Uniformly distributed loads kN/m<sup>2</sup></b>										
<b>Ultimate Limit State (ULS)</b>										
40mm	Pressure	3.72	2.67	2.00	1.53					
	Suction	4.94	3.54	2.51	1.88					
60mm	Pressure	5.19	3.89	2.97	2.33	1.86	1.50			
	Suction	6.90	4.52	3.20	2.40	1.88	1.52			
70mm	Pressure	5.78	4.40	3.41	2.71	2.18	1.78	1.50		
	Suction	7.58	4.97	3.52	2.64	2.07	1.67	1.45		
100mm	Pressure	7.55	5.94	4.74	3.83	3.12	2.60	2.18	1.83	1.56
	Suction	9.63	6.32	4.49	3.36	2.63	2.12	1.74	1.47	1.26
<b>Serviceability Limit State (SLS)</b>										
40mm	Pressure	2.72	1.55	0.91	0.55					
	Suction	3.83	2.31	1.49	1.00					
60mm	Pressure	4.07	2.50	1.59	1.03	0.68	0.44			
	Suction	5.79	3.75	2.55	1.80	1.31	0.98			
70mm	Pressure	4.64	2.94	1.93	1.30	0.89	0.60	0.50		
	Suction	6.63	4.42	3.09	2.24	1.67	1.27	1.10		
100mm	Pressure	6.33	4.26	2.96	2.09	1.50	1.08	0.79	0.57	0.41
	Suction	9.14	6.32	4.49	3.36	2.63	2.12	1.70	1.38	1.13

### Double Span Condition



Panel Thickness mm	Load Type	Span L in metres								
		1.8	2.2	2.6	3.0	3.4	3.8	4.2	4.6	5.0
<b>Uniformly distributed loads kN/m<sup>2</sup></b>										
<b>Ultimate Limit State (ULS)</b>										
40mm	Pressure	3.72	2.67	2.00	1.53	1.20	0.96	0.78	0.63	
	Suction	4.94	3.54	2.51	1.88	1.47	1.19	0.99	0.83	
60mm	Pressure	5.19	3.89	2.97	2.33	1.86	1.50	1.25	1.04	
	Suction	6.90	4.52	3.20	2.40	1.88	1.52	1.25	1.05	
70mm	Pressure	5.78	4.40	3.41	2.71	2.18	1.78	1.48	1.24	1.04
	Suction	7.58	4.97	3.52	2.64	2.07	1.67	1.37	1.16	0.99
100mm	Pressure	7.55	5.94	4.74	3.83	3.12	2.60	2.18	1.83	1.56
	Suction	9.63	6.32	4.49	3.36	2.63	2.12	1.74	1.47	1.26
<b>Serviceability Limit State (SLS)</b>										
40mm	Pressure	2.57	1.83	1.38	1.07	0.86	0.70	0.56	0.40	
	Suction	1.94	1.45	1.14	0.94	0.80	0.69	0.61	0.54	
60mm	Pressure	2.96	2.15	1.64	1.30	1.05	0.87	0.73	0.61	0.50
	Suction	2.33	1.76	1.41	1.17	1.00	0.87	0.78	0.70	0.60
70mm	Pressure	3.10	2.26	1.73	1.38	1.12	0.93	0.78	0.66	0.53
	Suction	2.50	1.90	1.52	1.27	1.08	0.95	0.85	0.76	0.66
100mm	Pressure	3.53	2.60	2.01	1.61	1.32	1.10	0.93	0.80	0.61
	Suction	3.02	2.30	1.85	1.55	1.33	1.17	1.05	0.95	0.84

#### Notes:

- Values have been calculated in accordance with AS/NZS 1170.0, and also take into account the methods described in EN 14509:2006 titled 'Self-supporting double skin metal face insulating panels (Light coloured) - Factory made products - Specifications', taking imposed loads (excluding snow), temperature and creep into account.
- The serviceability limit state is defined by local buckling, bending or crushing failure at an intermediate support or the exceedance of a specified deflection limit.
- Deflection limit for pressure loading is L/200 and suction loading is L/150.
- The allowable steelwork tolerance between bearing panels of adjacent supports is +/- 5mm, or L/600 whichever is the least.
- The actual wind suction load resisted by the panel is dependant on the number of fasteners used and the support width as well as the fastener material. This table is based on a support width of 60mm.
- The fastener calculation should be carried out in accordance with the appropriate standards. For further advice please contact Kingspan Technical Services.
- For FM approved applications, a maximum span of 2000mm applies.
- Load span tables for other panel specifications not shown are available from Kingspan Technical Services.

# KS1000 RW Wall Span Tables

## Wall Span Tables

Span capability of composite systems can depend on a number of external factors. The following table is based on typical light colour selections. For darker colours contact Kingspan Technical Services.

### Single Span Condition



Panel Thickness mm	Load Type	Span L in metres								
		1.8	2.2	2.6	3.0	3.4	3.8	4.2	4.6	5.0
<b>Uniformly distributed loads kN/m<sup>2</sup></b>										
<b>Ultimate Limit State (ULS)</b>										
40mm	Pressure	3.93	2.87	2.17	1.69	1.35	1.10	0.92		
	Suction	4.76	3.47	2.45	1.82	1.40	1.12	0.91		
60mm	Pressure	5.47	4.14	3.21	2.55	2.06	1.70	1.42	1.20	1.03
	Suction	6.85	4.45	3.13	2.33	1.80	1.43	1.17	0.97	0.82
70mm	Pressure	6.10	4.69	3.68	2.59	2.40	1.99	1.67	1.42	1.22
	Suction	7.53	4.90	3.45	2.57	1.99	1.58	1.29	1.07	0.91
100mm	Pressure	7.97	6.34	5.10	4.16	3.43	2.87	2.43	2.08	1.79
	Suction	9.56	6.24	4.40	3.28	2.54	2.02	1.65	1.37	1.16
<b>Serviceability Limit State (SLS)</b>										
40mm	Pressure	6.42	3.94	2.57	1.74	1.23	0.89	0.66		
	Suction	5.95	3.57	2.27	1.50	1.03	0.72	0.52		
60mm	Pressure	9.32	6.08	4.15	2.94	2.13	1.59	1.21	0.93	0.73
	Suction	8.82	5.66	3.80	2.64	1.88	1.38	1.02	0.78	0.60
70mm	Pressure	10.52	7.05	4.93	3.56	2.64	2.00	1.54	1.21	0.96
	Suction	10.02	6.62	4.57	3.25	2.37	1.78	1.34	1.04	0.81
100mm	Pressure	14.12	9.94	7.25	5.43	4.15	3.23	2.54	2.03	1.64
	Suction	13.62	9.49	6.86	5.09	3.85	2.96	2.30	1.82	1.45

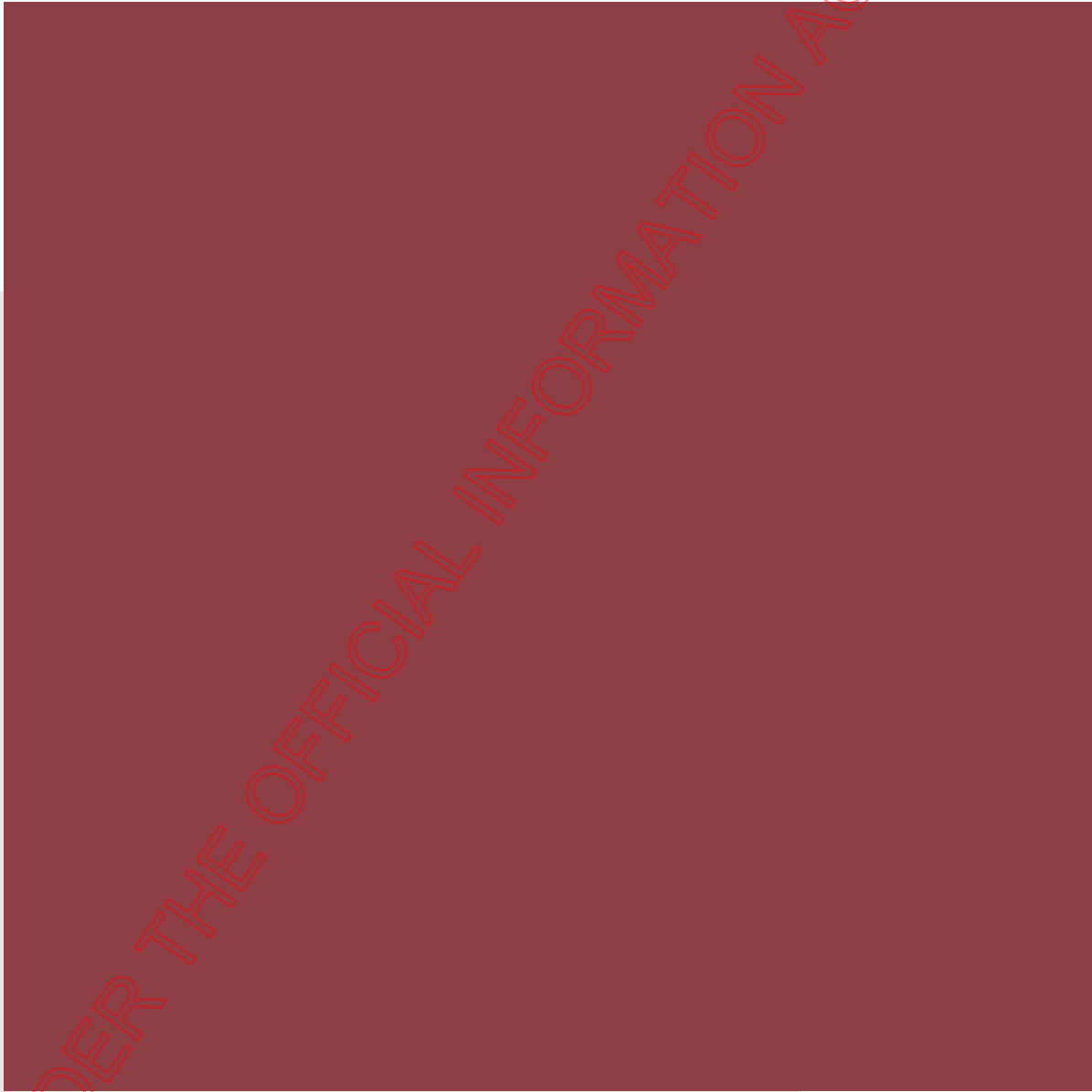
### Double Span Condition



Panel Thickness mm	Load Type	Span L in metres								
		1.8	2.2	2.6	3.0	3.4	3.8	4.2	4.6	5.0
<b>Uniformly distributed loads kN/m<sup>2</sup></b>										
<b>Ultimate Limit State (ULS)</b>										
40mm	Pressure	3.93	2.87	2.17	1.69	1.35	1.10	0.92		
	Suction	4.76	3.47	2.45	1.82	1.40	1.12	0.91		
60mm	Pressure	5.47	4.14	3.21	2.55	2.06	1.70	1.42	1.03	
	Suction	6.85	4.45	3.13	2.33	1.80	1.43	1.17	0.82	
70mm	Pressure	6.10	4.69	3.68	2.59	2.40	1.99	1.67	1.42	1.22
	Suction	7.53	4.90	3.45	2.57	1.99	1.58	1.29	1.07	0.91
100mm	Pressure	7.97	6.34	5.10	4.16	3.43	2.87	2.43	2.08	1.79
	Suction	9.56	6.24	4.40	3.28	2.54	2.02	1.65	1.37	1.16
<b>Serviceability Limit State (SLS)</b>										
40mm	Pressure	2.69	1.96	1.51	1.20	0.99	0.83			
	Suction	1.82	1.32	1.01	0.81	0.66	0.56			
60mm	Pressure	3.11	2.31	1.80	1.46	1.21	1.03	0.84	0.67	
	Suction	2.18	1.60	1.25	1.01	0.84	0.72	0.62	0.54	
70mm	Pressure	3.13	2.33	1.83	1.48	1.24	1.05	0.87	0.72	1.35
	Suction	2.34	1.72	1.35	1.09	0.91	0.78	0.68	0.59	0.98
100mm	Pressure	3.19	2.40	1.90	1.55	1.31	1.12	0.97	0.86	0.68
	Suction	2.82	2.09	1.64	1.34	1.13	0.97	0.84	0.74	0.66

#### Notes:

- Values have been calculated in accordance with AS/NZS 1170.0, and also take into account the methods described in EN 14509:2006 titled 'Self-supporting double skin metal face insulating panels (Light coloured) - Factory made products - Specifications', taking imposed loads (excluding snow), temperature and creep into account.
- The serviceability limit state is defined by local buckling, bending or crushing failure at an intermediate support or the exceedance of a specified deflection limit.
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- The allowable steelwork tolerance between bearing panels of adjacent supports is +/- 5mm, or L/600 whichever is the least.
- The actual wind suction load resisted by the panel is dependant on the number of fasteners used and the support width as well as the fastener material. This table is based on a support width of 60mm.
- The fastener calculation should be carried out in accordance with the appropriate standards. For further advice please contact Kingspan Technical Services.
- For FM approved applications, a maximum span of 2000mm applies.
- Load span tables for other panel specifications not shown are available from Kingspan Technical Services.



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For the product offering in other markets please contact your local sales representative or visit [www.kingspanpanels.com](http://www.kingspanpanels.com)

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# CERTIFICATE OF CONFORMITY

This is to certify that



## KINGSPAN – KS1000RW TRAPEZOIDAL INSULATED ROOF AND WALL PANELS

### Product description

The Kingspan KS1000RW roof and wall panel system products consist of Zinalume sheets that contain a PIR core.

The exterior weather sheet is 0.5mm thick Zinalume G300S AZ150/AZ200 AM coated sheet. The core is polyisocyanurate (PIR). The internal liner sheet is 0.4mm Zinalume G300S AZ coated steel.

### Product purpose or use

An insulated roof and wall panel system for use on Residential, Communal Residential, Communal non-residential, Commercial, Industrial buildings and Outbuildings.

### Certificate holder

Kingspan Ltd  
97 Montreal St,  
PO Box 39136, Harewood, Christchurch,  
8545 New Zealand  
t: 0800 12 12 80  
t: +64 3 260 5530  
w: [www.kingspanpanels.co.nz](http://www.kingspanpanels.co.nz)

### CodeMark certification body

SAI Global Certification Services Pty Limited  
(ACN 108 716 669) Trading as "SAI Global"  
JAS-ANZ Accreditation No. Z1440295AS  
Address: 680 George Street, Sydney, NSW 2000  
Ph: +61 2 8206 6000  
Website: [www.saiglobal.com](http://www.saiglobal.com)

### Complies with the New Zealand Building Code (NZBC):

If designed, used, installed and maintained in accordance with the scope of this Certificate, the above mentioned product will meet the following provisions of the NZBC:

- B1 Structure: B1.3.1, B1.3.2.
- B2 Durability: B2.3.1(b),
- C3 Spread of Fire: C3.4(a),
- E2 External Moisture: E2.3.1, E2.3.2, E2.3.6 (including penetrations as defined in the drawings listed below)
- E3 Internal Moisture: E3.3.5,
- H1 Energy Efficiency: H1.3.1

### Subject to the following conditions and limitations:

1. The product must be designed, used, installed and maintained in accordance with the following Kingspan Ltd product information:
  - KS1000RW Trapezoidal Insulated Roof and Wall Panels Product Datasheet (Dated January 2016 – NZ version)
  - Kingspan KS1000RW Codemark Roof Details Version Q3 2015 and Kingspan KS1000RW Codemark Wall Details Version Q3 2015 (including penetrations as defined)
  - Insulated Roof & Wall Panels Installation Guide Jan 2016
  - Technical bulletin TB7 for marine environments
2. The use of the product for fire rated walls is outside the scope of this certificate.
3. The product must be used for its intended purpose.
4. Clauses of the NZBC not listed above are outside the scope of this certificate.
5. Kingspan Ltd will notify SAI Global in accordance with Regulation 15 of the Building (Product Certification) Regulations 2008

Heather Mahon - Risk and Compliance Manager APAC

09/06/2016

Date of issue

SAIG-CM20104

Certificate Number



JAS-ANZ



[WWW.JAS-ANZ.ORG/REGISTER](http://WWW.JAS-ANZ.ORG/REGISTER)

This certificate is issued by SAI Global Certification Services Pty Limited, an independent certification body accredited by the product certification accreditation body (JAS-ANZ) appointed by the Chief Executive of the Ministry of Business Innovation & Employment (MBIE) under the Building Act 2004. The MBIE does not in any way warrant, guarantee, or represent that the building method or product the subject of this certificate conforms with the New Zealand Building Code, nor accept any liability arising out of the use of the building method or product. The MBIE disclaims, to the extent permitted by law, all liability (including negligence) for claims of losses, expenses, damages, and costs arising as a result of the use of the building method(s) or product(s) referred to in this certificate. This Certificate may only be reproduced in its entirety.

4 August 2017

Mr Coban Walls  
s 9(2)(a)

**Building consent number:** BCO10030652-2  
**Address:** 6 Island Bay Road, Beach Haven  
**Description:** RBW - Stage 2 - the construction of the two level, three bedroom dwelling with three car garage. this will include all above ground structure cladding, glazing and roofing, the roof deck over garage and hard landscaping.  
**Area office:** Takapuna / Graham Street Service Centre

Dear Sir

Thank you for your patience regarding the building consent application at 6 Island Bay Road, Beach Haven.

Your proposal has a number of alternative materials and methods of construction, which can be more challenging and often take more time to understand how compliance will be achieved, than using more convention methods. That is not to say Council are anti-innovation, in fact quite the opposite, it's just at the end of the day, Council must be satisfied on reasonable grounds that if built per the consented documents, compliance will be achieved.

There are still a number of areas that need further explanation/clarity as follows

1. You have nominated X-lam floor and floor panels, but it is not clear as to the treatment level if any is proposed, and dependent on the answer to this, may raise other questions.
2. The aluminium joinery, which we have discussed, and I have subsequently discussed with my manager, remains a concern. Other than the AAMA field test for weathertightness, nothing else has been provided to demonstrate compliance. As explained, when using E2/AS1 for guidance, NZS 4211:2008 (Specification for performance of windows) is the testing standard referenced. Again this is not to say this is the only standard that can be used, however having said that, it is important to understand the NZS 4211 test is not just for weathertightness but includes other tests. Council need more information to be satisfied compliance will be achieved.
3. The use of Kingspan in the roof and ceiling as detailed is of concern. You have supplied three Kingspan manuals, and the Kingspan CodeMark (SAIG-

CM20104) for Kingspan KS1000RW. The CodeMark makes reference to a data sheet dated January 2016 (NZ version), which does not appear to have been provided. There is other material referred to in the CodeMark which also do not appear to have been provided either. Obviously it is not just a matter of providing the material, but also ensuring the relevant information within them reflects those within the application.

4. Also in relation to the Kingspan CodeMark, not all clauses of the Building Code are covered, therefore those code clauses that are appropriate to this application and not covered by the CodeMark need to be addressed.
5. Some of the detailing I have concerns with for example (not to be considered a complete list)  
Sheet S-10 detail 2 –
  - a. There is a fixing of the plywood forming the gutter fixed only into the PIR insulation,
  - b. What is the down turn of the cap flashing into the gutter.
  - c. It is unclear what the top bolt in the beam is doing.
  - d. It appears there is RAB to be attached over the Kingspan, how will this be attached?
  - e. There is an aluminium bracket only fixed into the Kingspan.
  - f. Is the cladding system based on a drain and ventilated cavity or a drained cavity.
  - g. Depending on the treatment level if any of the X-lam wall panels, are there any compatibility issues to be considered not only between the X-lam and the aluminium skin of the Kingspan, but in general.
6. The fixing of the weatherboards with 120mm long by 5.0 dia. nails and the location of the nails is not normal trade practice. The location of the fixings and size of the nails I am concerned will as the fixings will likely split the boards and also raise the issue of the ongoing weathertightness of the cladding itself.
7. The reliance of sealant as a primary means of weathertightness is not in Councils opinion best practice.
8. The entry roof, above the front door is lined with PIR insulation with TPO membrane. Can TPO be applied to PIR insulation?

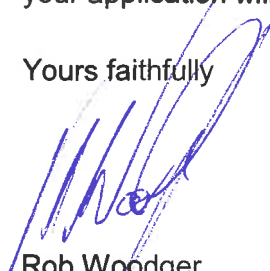
The above is not to be considered a comprehensive list of all items that need addressing, but I think at this stage, it is fair to say Council are not in a position with the information provided, to be satisfied on reasonable grounds that compliance with the building code will be achieved and be able to issue the building consent.

I appreciate this is not the kind of news you were hoping for, but Council would be failing its statutory obligations under the Building Act if it were to issue the building consent based on the information provide to date.

Where to from here? With due respect to the designer, there is a lot more information and work required (possibly including testing) to be done to get it to the point a building consent can be issued. May I suggest having your proposal peer reviewed by a person with experience in alternative designs/solutions. Alternatively the option to apply for a determination directly to the Ministry of Innovation and Employment (MBIE) challenging our decision, refusing to issue the building consent, is also available. Information relating to determinations can be obtained from the MBIE web-site.

Finally, unless new information demonstrating compliance is received by Council within the next 28 days from the date of this correspondence, under section 50 of the Building Act 2004 your application will be refused.

Yours faithfully

  
Rob Woodger  
Team Leader Specialist Reclads  
Building Control

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

From: s 9(2)(a) @timspec.co.nz  
Subject: RE: Island Bay house - Vert Cedar over rigid insulation / Urgent  
Date: 19 December 2016 at 2:46 PM  
To: Corban Walls s 9(2)(a)

Hi Corban, please see the attached installation specification for the Timspec Certclad cavity based weatherboard system. This system has been tested in accordance with E2/AS1 and has achieved CodeMark certification and is considered an alternative solution to the NZ building code..

In the case of your project as detailed below, the cladding fixing will need to be increased to allow for the 50mm of insulation to the exterior of the framing, and still meet a minimum 30mm of framing penetration.

Ensure the fixings are pre-drilled using a drill bit slightly smaller than the nail shank to ensure a snug fit and reduce the risk of capillary draw. All other aspects of the Certclad installation specification must be adhered to.

I trust this will provide the information you require, but please let me know if you require anything further.

Regards,  
s 9(2)(a)

s 9(2)(a)  
Architecture & Specifications Manager  
mobile s 9(2)(a)  
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---

From: Corban Walls s 9(2)(a)  
Sent: Friday, 16 December 2016 11:33 a.m.  
To: s 9(2)(a) @timspec.co.nz  
Sub: ert Cedar over rigid insulation / Urgent

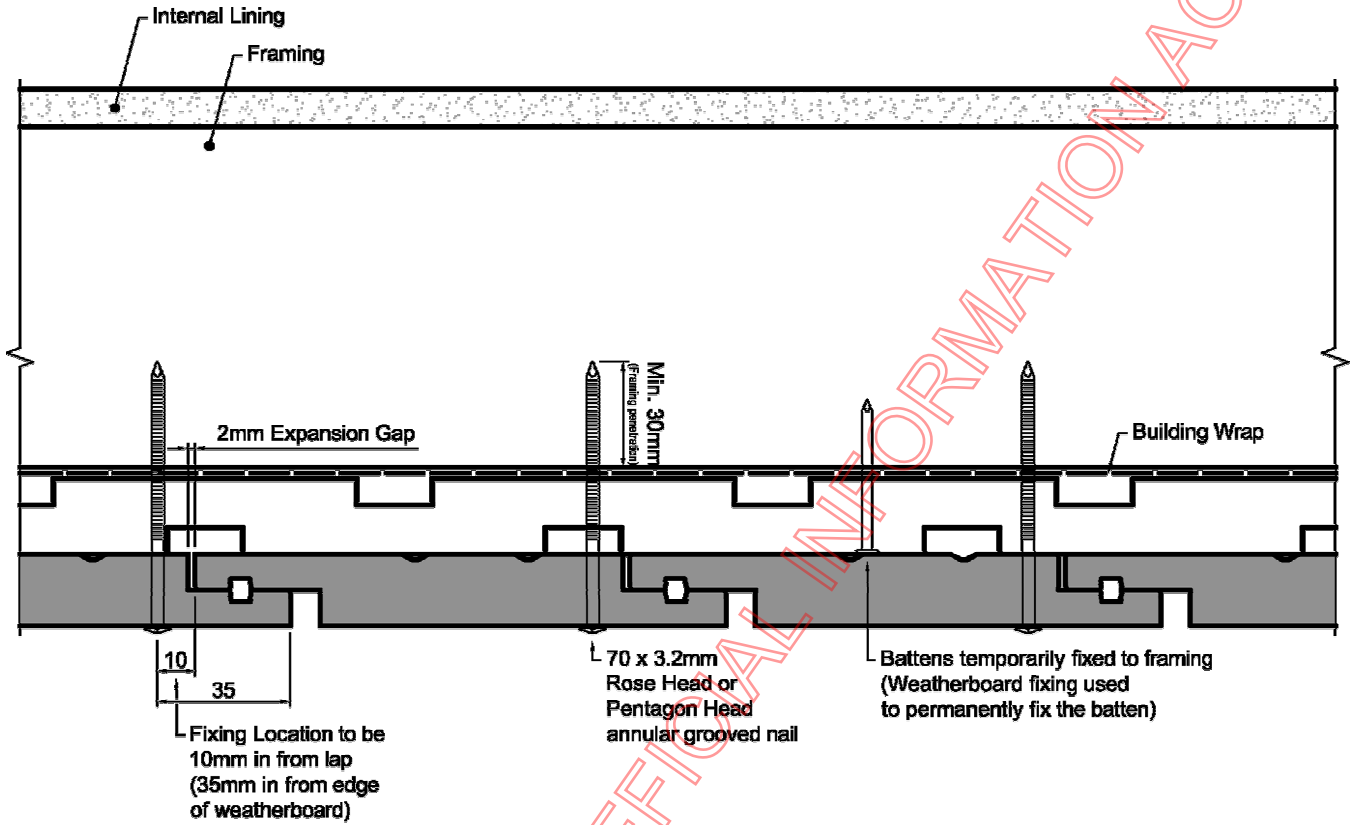
Hi s 9(2)(a)

Thanks for your time and



## FIXING DETAILS FOR WEATHERBOARD (CONTINUED)

### DIAGRAM FOR STAINED OR BARE WEATHERBOARDS WITH PACKER CAVITY BATTENS



Note: Nails are to be on an upward angle to prevent water running down the nail through the cavity

### STAINED OR BARE WEATHERBOARDS WITH PACKER CAVITY BATTENS

Care must be taken when nailing rose head or pentagon head nails, they must be hand driven. Too much force will damage the face of the timber.

When nailing rose head or pentagon head nails on an upward angle, care should be taken to get the nails finishing on the face of the weatherboard.



21 August 2017

Mr C Walls

s 9(2)(a)

Dear Sir

**Building consent number:** BCO10030652-2  
**Address:** 6 Island Bay Road, Beach Haven  
**Description:** RBW - Stage 2 - the construction of the two level, three bedroom dwelling with three car garage. this will include all above ground structure cladding, glazing and roofing, the roof deck over garage and hard landscaping.  
**Area office:** Takapuna / Graham Street Service Centre

I have received your e-mails and attachments of the 9<sup>th</sup> and 10<sup>th</sup> August 2017

As outlined in my previous correspondence of the 4 August 17, you are proposing a number of alternative solutions, and as such demonstrating compliance with the building code in some instance can be quite involved. Again I reiterate Council are not anti-alternative solutions, but must be satisfied on reasonable grounds that if built per the issued building consent compliance will be achieved.

The items I had identified earlier were in no way a comprehensive list. To provide assistance I have responded to some of the information provided in your e-mail.

The X lam floor is noted as being treated to H1.2. Using NZS 3602: 2003 for guidance H1.2 raises other questions in and around wet areas.

The issue with the windows we have discussed a number of times. As Council do not have an expert in the field of window joinery testing there is no value in repeating the test for me or anyone else in Council for that matter. Furthermore testing of window joinery is not just about weathertightness. You may wish to consider the requirements of NZS 4211 for guidance.

Providing the latest Kingspan documentation including Codemark is a step in the right direction, but as previously stated the relevant information to allow the building to be built needs to be reflected on the plans. As far as the CodeMark goes what about those clauses of the Building Code that are not covered by the CodeMark, what will be provided to address them?

The building consent application documentation states 120x5.0 dia nails, now you are calling up 8g screws, the manufacturer may have approved this, but this does not demonstrate compliance with the Building Code, and what of the location of the fixings?

I have no issue with the TPO membrane, but does the CodeMark cover it being attached to PIR insulation?

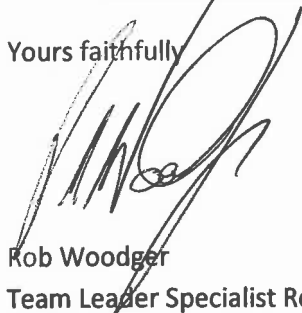
The designer is responsible for ensuring that the plans and specifications are sufficient to result in the building work complying with the Building Code, if it were properly completed in accordance with those plans and specifications. Council's role is to check and ensure that the application complies with the Building Code. Yes, it is not uncommon for Council to raise questions, but these should be fairly minor.

I am sorry, but the information provided to date is well short of Council's expectations in demonstrating compliance. Hence my recommendation to have the application peer reviewed, and obviously the determination option is still available.

I have extent the time for you to get this information together a further 28 days from today, as there is a fair amount of work required to get it to a point where a building consent can be issued.

As I will be on annual leave from the end of this week, any further correspondence relating to this matter should be addressed to Mark Murray. His e-mail address is [mark.murray@aucklandcouncil.govt.nz](mailto:mark.murray@aucklandcouncil.govt.nz).

Yours faithfully



Rob Woodger  
Team Leader Specialist Reclads  
Building Control

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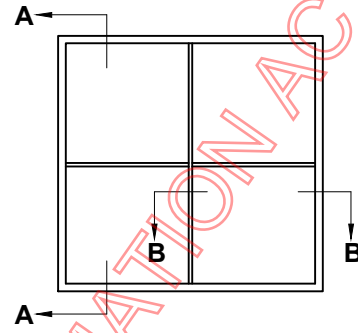
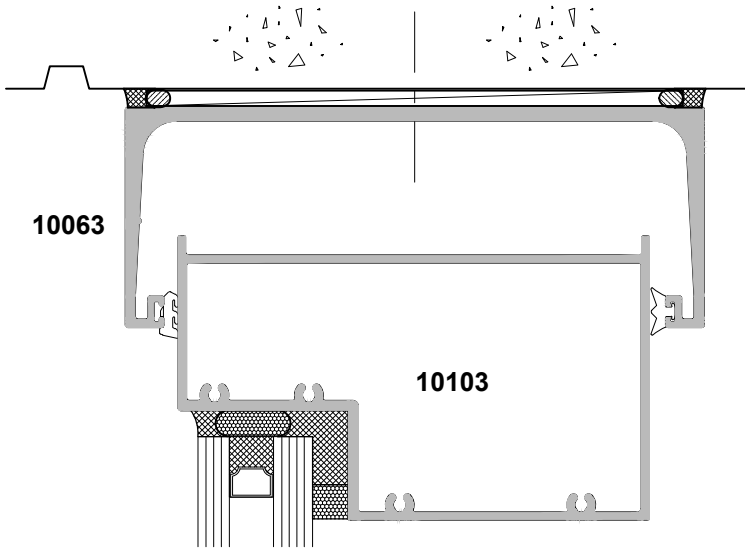


**125MM STRUCTURAL GLAZED SYSTEM  
DOUBLE GLAZED, SEISMIC SYSTEM  
CROSS SECTION**

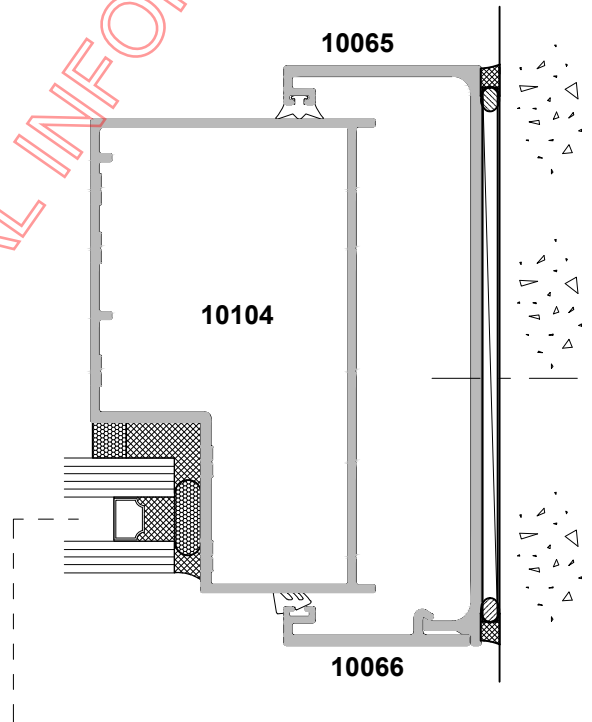
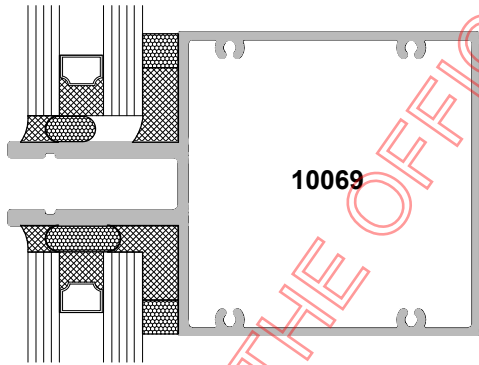
CAD REF. VCSG01-0

DATE  
01.04.17

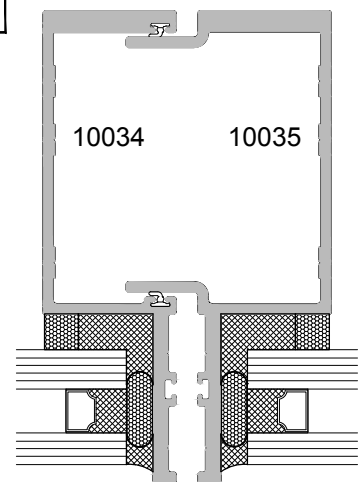
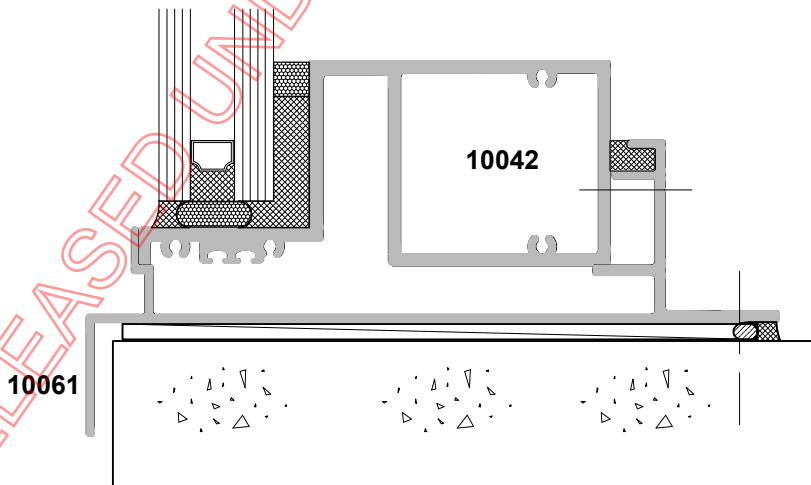
SCALE  
1:2



**SECTION A-A**



**SECTION B-B**



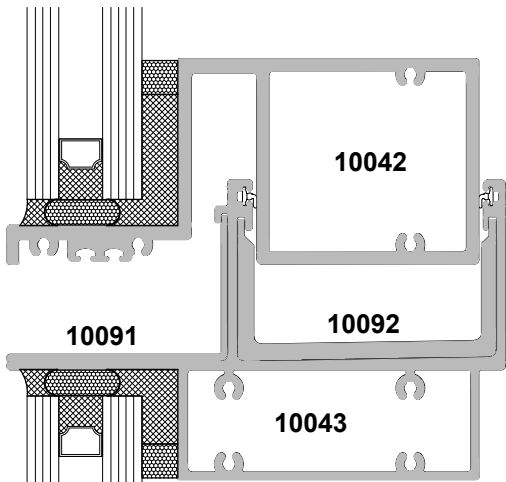


**125MM STRUCTURAL GLAZED SYSTEM  
DOUBLE GLAZED, SEISMIC SYSTEM  
CROSS SECTION**

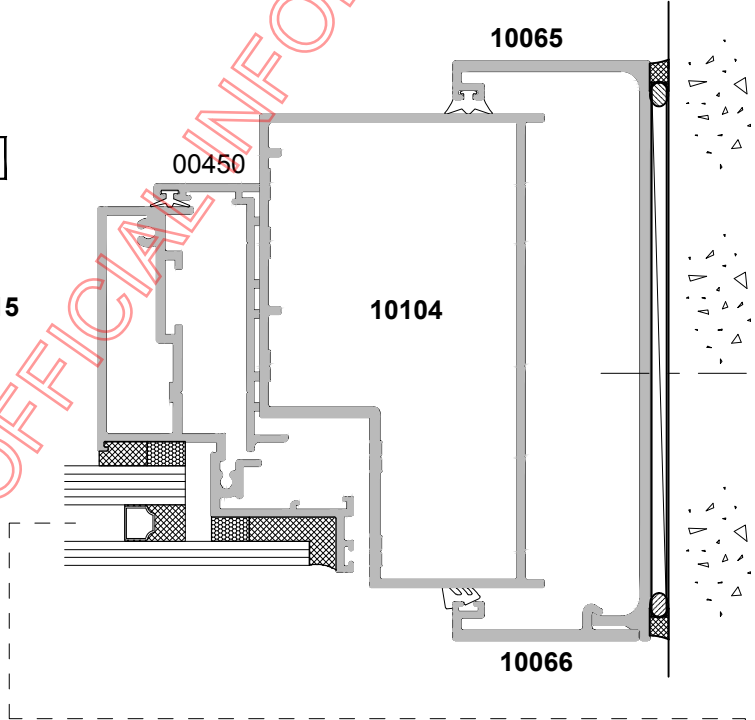
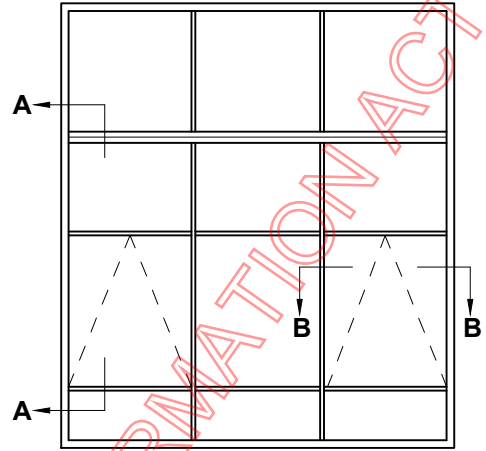
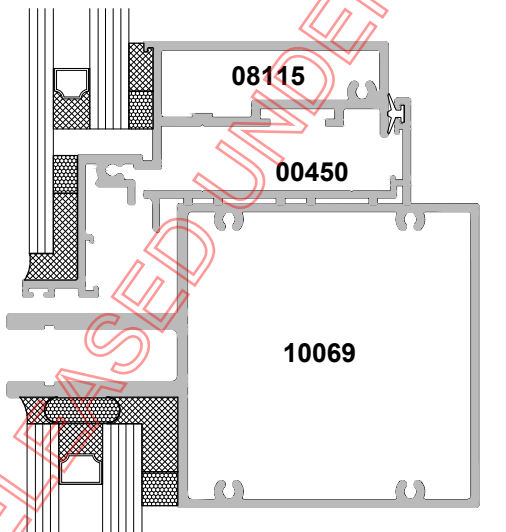
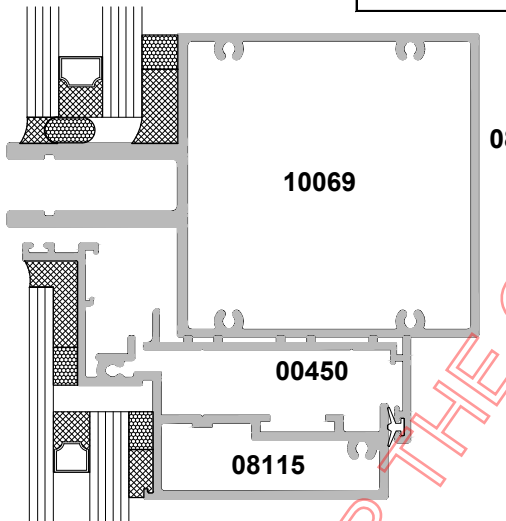
CAD REF. VCSG02-0

DATE  
01.04.17

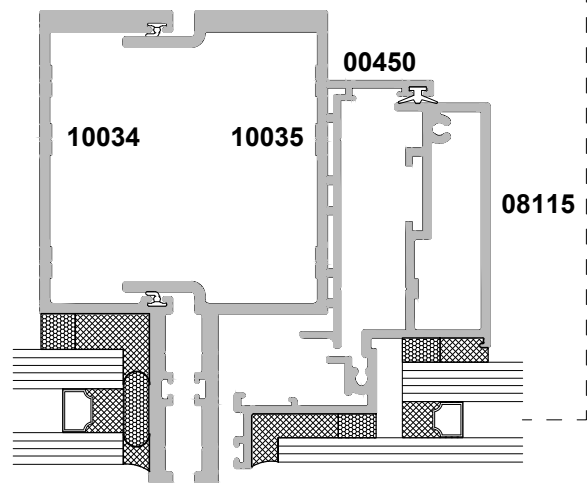
SCALE  
1:2



**SECTION A-A**



**SECTION B-B**



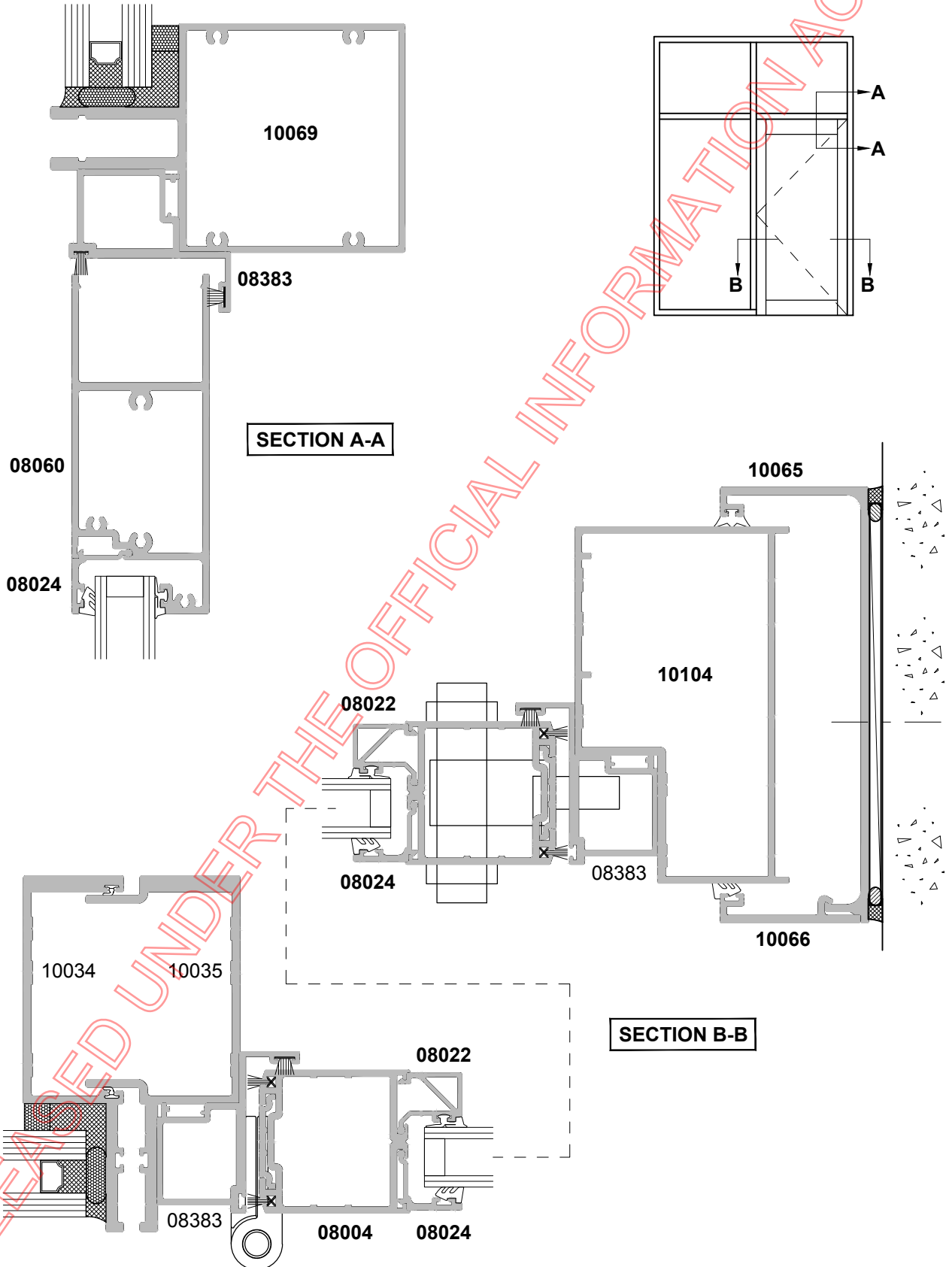


**125MM STRUCTURAL GLAZED SYSTEM**  
**DOUBLE GLAZED, SEISMIC SYSTEM**  
CROSS SECTION

CAD REF. VCSG03-0

DATE  
01.04.17

SCALE  
1:2



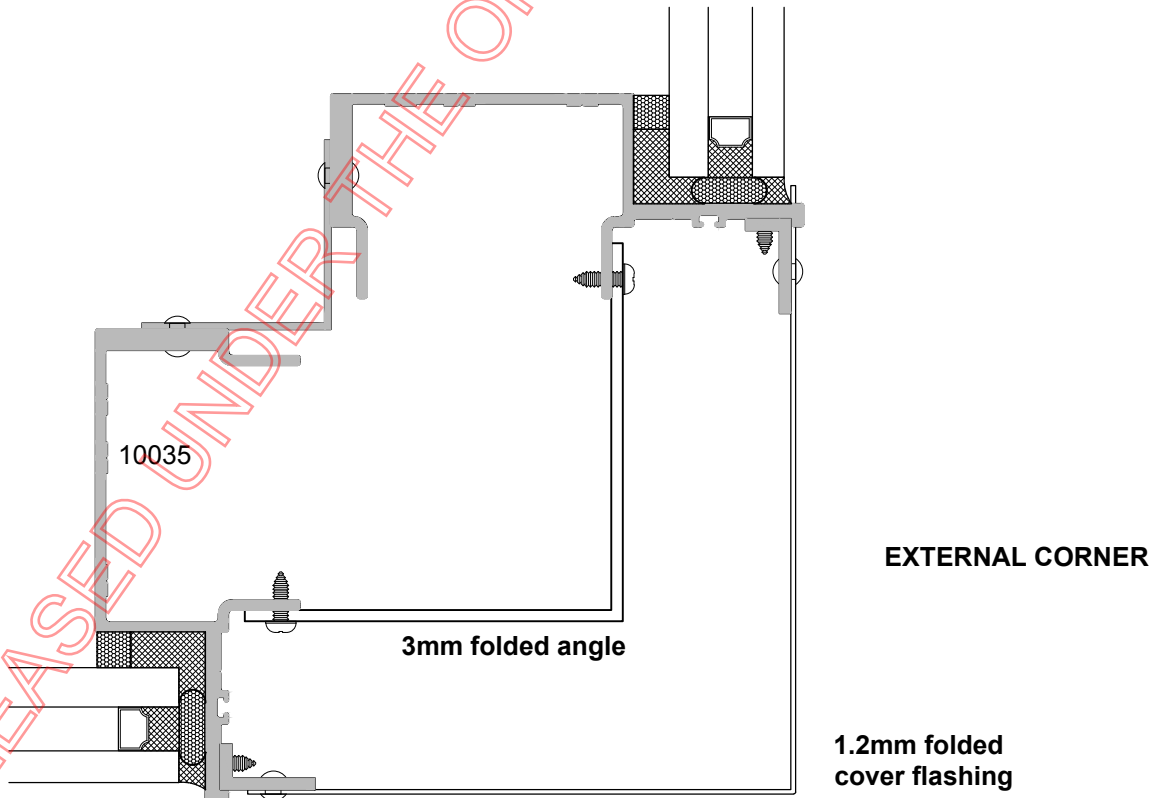
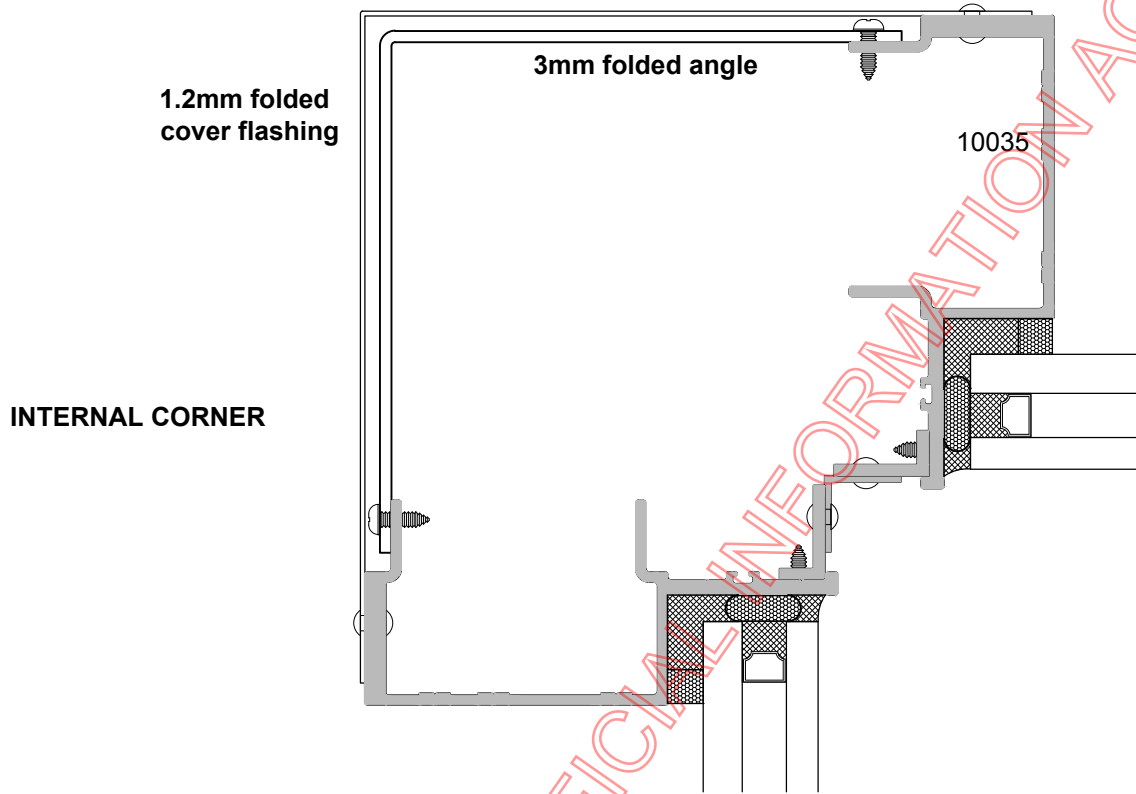


**125MM STRUCTURAL GLAZED SYSTEM  
DOUBLE GLAZED 90° CORNER MULLIONS  
CROSS SECTION**

CAD REF. VCSG08-0

DATE  
01.04.17

SCALE  
1:2

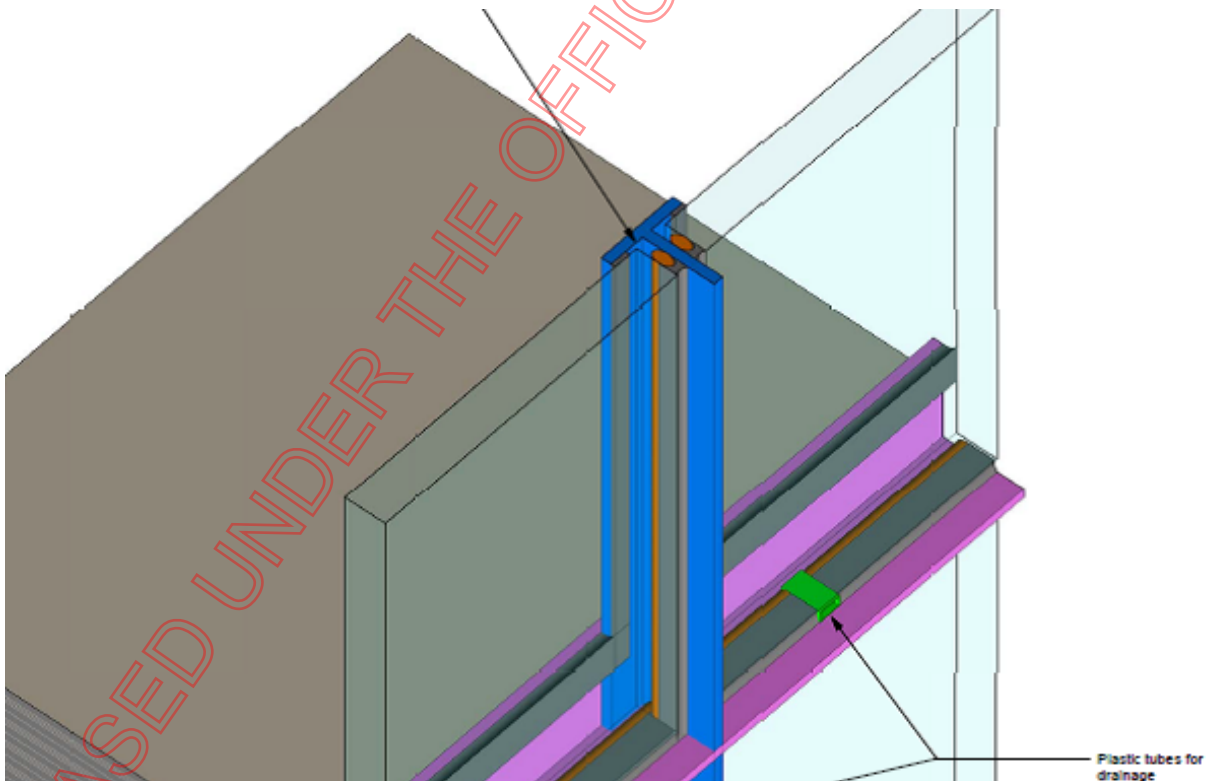


From: s 9(2)(a) @viridianglass.co.nz  
Subject: RE: Island Bay Rd House  
Date: 17 January 2017 at 12:40 PM  
To: Corban Walls @euroglass.co.nz  
Cc: s 9(2)(a) @euroglass.co.nz, s 9(2)(a) @euroglass.co.nz

Hi Corban

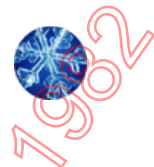
The local Dow Corning agent has said that they are prepared to offer an adhesion warranty for the project provided we fulfil a number of conditions such as:

- Full print review
- Testing of samples for compatibility
- At least two deglaze on site to check the quality of the silicone.
- Dust free environment





**From:** Corban Walls s 9(2)(a)  
**Subject:** Re: 6 Island Bay Road  
**Date:** 4 August 2017 at 5:16 PM  
**To:** Robert Woodger Robert.Woodger@aucklandcouncil.govt.nz  
**Cc:** Graeme Stokes Graeme.Stokes@aucklandcouncil.govt.nz, Iskra Trenceva Iskra.Trenceva@aucklandcouncil.govt.nz



Hi Rob,

Thanks for your email.

7 out of 8 of those questions are very easily answered and I can provide the additional information for these promptly. In regards to the consent application possibly being refused, are you telling me that we've come this far over 9 months (26 months in total) all for it to be refused? This doesn't seem logical to me? Also 28 days is unfair considering how long I've waited for responses from yourself and the multitude of other counsellors I've had to deal with through this process.

The glazing seems to be the only issue here and I've proven watertightness as specifically requested by Northshore council. I think it's unfair and unjust to continually and repeatedly place more hurdles in front of me... 241 RFI's and counting! The glazing in principle works on vertical overlaps of the joinery itself with additional weatherproofing via the use of structural silicon. This far exceeds any other joinery design which relies solely on silicon at the intersections. All buildings rely on silicon to keep window joinery weathertight or a rubber weatherseal which is far inferior to structural silicon. Our design has aluminium overlaps which makes it virtually impossible for water to penetrate the building envelope. If this isn't an acceptable alternative design I'm not sure what is... especially given the fixing glass into a wooden frame with putty and paint is acceptable. This discrepancy in the building code is inconceivable particularly in my situation.

Can you please consider my situation and design from a non-beaurocratic, human perspective.


Thanks, Corban

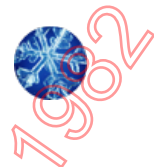
On Fri, Aug 4, 2017 at 1:56 PM, Robert Woodger <[Robert.Wxxxxxx@xxxxxxxxxxxxxxxxxxxx.xx](mailto:Robert.Wxxxxxx@xxxxxxxxxxxxxxxxxxxx.xx)> wrote:

[The People's Panel is a quick and easy way for Aucklanders to have their say](#)



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**From:** Corban Walls s 9(2)(a)   
**Subject:** Re: 6 Island Bay Road  
**Date:** 30 August 2017 at 10:56 AM  
**To:** Robert Woodger Robert.Woodger@aucklandcouncil.govt.nz  
**Cc:** Mark Murray Mark.Murray@aucklandcouncil.govt.nz



Hi Mark,

I understand that Rob is away on annual leave. Are you able to please help me progress our building consent?

I've been waiting weeks just to get email replies and in the interim I'm very concerned that my building consent is going to be cancelled. I've been working on this with council for 10 months now and my family is being severely effected by this ordeal. I need to find the most practical solution here but we can't progress forward when it takes between 2-5 weeks just to get an email response from council.

These are the questions I need you to answer:

1. Window Joinery - Along with filing for a determination on the existing design I would also like to consider using Vantage Aluminium's proprietary system for the window joinery. Can you please confirm if we redesign using this system whether or not we will get building consent
2. Kingspan Panels - As attached are you able to tell me what part of the building code is not covered by Kingspan's CodeMark? They have never had an issue before and we just some clarification around this.

I look forward to your prompt reply.

Thanks, Corban

s 9(2)(a)

**Corban Walls**

s 9(2)(a)



On 21/08/2017, at 8:46 PM, Corban Walls s 9(2)(a) wrote:

Hi Rob,

Thanks for your letter.

We have decided to go for a proprietary window joinery system as we just can't afford anymore hold ups. The delays are effecting my family massively now and we just need to move on and build our house.

Please see attached info. Can you please confirm that once we sort the Kingspan CodeMark issue that we'll have our consent?

Thanks, Corban

<sp\_signature.jpg>

**Corban Walls**

s 9(2)(a)

<11i & 11l TimSpec Cedar - (dragged).pdf>  
<SKMBT\_C451 17082111181 copy.pdf>  
<Vantage-Commercial-Structural-Glaze-Drawings.pdf>

On 10/08/2017, at 12:37 AM, Corban Walls s 9(2)(a) wrote:

Hi Rob,

In addition to the information I emailed you yesterday please find the breakdown below of what I've covered in my design of the glazing and joinery. This should easily suffice for the design to be a suitable 'alternative solution'.

#### **CUSTOM GLAZING**

##### **Information provided:**

- Specification of glass
- Specification of adhesives for structural glazing

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- Adhesive suppliers approval
- Viridian Glass engineers glazing calculations
- Viridian Glass PS1
- Structural Engineers calculations
- Structural Engineers PS1
- Watertightness testing
- Provided Certificate of Design Works for custom glazing

**These things have been considered and allowed for:**

- Seismic moment
- Safety from falling
- Extra High Wind Zone
- Live and static loads considering flooring deflection
- Required site conditions specified for install
- Watertightness
- Maintenance
- Joinery drainage and water deflection

All of the information that has been requested by council has been provided, testing has been performed and there is no other facet of the design that needs to be considered unless you can inform me otherwise.

I look forward to hearing from you.

Thanks, Corban

<sp\_signature.jpg>

**Corban Walls**  
s 9(2)(a)



On 9/08/2017, at 2:11 PM, Corban Walls s 9(2)(a) wrote:

Hi Rob,

Please find attached responses to your questions and info. Most of your queries were just a basic misunderstanding of the drawings.

Let me know if you need anything else.

Thanks, Corban

<sp\_signature.jpg>

**Corban Walls**  
s 9(2)(a)



- <RFI 1 - N1561 - 6 Island Bay Rd FOR CONSTRUCTION.170407.Dpdf.pdf>
- <RFI 3 - NZ KS1000RW Data Sheet Jan 16 - LR.pdf>
- <RFI 3 - V.1 kingspan-ks100rw-roof-wall-panels.pdf>
- <SKMBT\_C451 17080413400 copy.pdf>

On 4/08/2017, at 1:56 PM, Robert Woodger <Robert.Wxxxxx@xxxxxxxxxxxxxxxxx.xxx.xx> wrote:

The People's Panel is a quick and easy way for Aucklanders to have their say.

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**From:** Emma van den Eykel  
**Sent:** Wednesday, 6 September 2017 9:02 a.m.  
**To:** Determinations  
**Subject:** FW: Request for information - Determination Island Bay (Ref 2975) [UNCLASSIFIED]  
**Attachments:** Dow Corning Acceptance.pdf; Emails 4th August.pdf; Emails 9th&10th August.pdf; RFI's 6.zip; RFI's 7.zip

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**From:** Corban Walls s 9(2)(a) ]  
**Sent:** Tuesday, 5 September 2017 4:55 p.m.  
**To:** Emma van den Eykel  
**Subject:** Re: Request for information - Determination Island Bay (Ref 2975) [UNCLASSIFIED]

Hi Emma,

Thanks for your email. Please find the attached info as below:

- 4th August RFI letter responses (Folder 'RFI's 6')
- Emails on the 4th, 9th & 10th August 2017
- I have responded to the RFI's on the 21st August but have had no response (Folder 'RFI's 7')
- We have had water tightness testing done on the window joinery and Viridian Glass have done the calculations for the glazing. The joinery is structurally supported by the structure of the building which our structural engineer has covered off in his design. We have provided everything they have asked for.
- The Dow Corning approval is effectively covered off in the Viridian Glass PS1. I have attached the email from them showing approval and supply of full warranty.

Please let me know if you need anything else.

I look forward to hearing from you.

Kind regards, Corban

s 9(2)(a)

Corban Walls  
s 9(2)(a)

On 5/09/2017, at 4:29 PM, Emma van den Eykel <[Emma.vandenEykel@mbie.govt.nz](mailto:Emma.vandenEykel@mbie.govt.nz)> wrote:

Hi Corban,

We will shortly start writing the draft determination for 6 Island Bay Road.

Can you please provide the following information to assist with drafting the determination:

- The responses to the request for information letter dated 4 August 2017 (I note in the Council's letter dated 21 August 2017, it refers to two emails dated 9 and 10 August 2017).
- Any response to the request for information letter dated 21 August 2017 (I note the determination application was submitted 23 August 2017, so we would like confirmation if there was no response).
- Any calculations and/or report submitted to the Council to support the compliance of the window joinery as an alternative solution.
- The "adhesive suppliers approval (Dow Corning)", which is noted in your submission but we don't appear to have received a copy of this document.

We look forward to receiving the information.

Kind regards,

**Emma van den Eykel**

ADVISOR DETERMINATIONS

Determinations | Housing and Tenancy Services | Market Services

Ministry of Business, Innovation & Employment

Hikina Whakatutuki – Lifting to make successful

[Emma.vandeneysel@mbie.govt.nz](mailto:Emma.vandeneysel@mbie.govt.nz) | Telephone +64 4 901 8618

15 Stout St, PO Box 1473, Wellington 6140

<image001.jpg>

Please note: all correspondence relating to this determination should be addressed to [determinxxxxx@xxxx.xxxx.nz](mailto:determinxxxxx@xxxx.xxxx.nz) and copied to all parties involved.

[www.govt.nz](http://www.govt.nz) - your guide to finding and using New Zealand government services

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**From:** Alexandra McCrindle on behalf of Determinations  
**Sent:** Monday, 30 October 2017 12:37 p.m.  
**To:** Corban Walls  
**Cc:** Determinations; Malcolm McCluskey  
**Subject:** RE: Request for information - Determination Island Bay (Ref 2975) [UNCLASSIFIED]

Dear Corban

The application has been placed on hold as requested, but in answer to your inquiry below it is considered that the consent application is lacking in some detail, such as verification of the capacity of the metal angles and fixings supporting the glass, a lack of clarity about the type of sealant used to hold the glass, the anticipated inter-storey deflection, and similar. We also do not consider the standard referred to by Council is the appropriate test for the glazing in this situation given the glass is a fixed cladding element.

Please let us know whether you wish to proceed with your application for determination, or if you wish for it to be kept on hold, or if you wish to withdraw it.

Kind regards  
Alexandra

**Alexandra McCrindle**

ADMINISTRATOR, DETERMINATIONS

Housing & Tenancy Services, Market Services  
Ministry of Business, Innovation & Employment  
*Hikina Whakatutuki - Lifting to Make Successful*

[Alexandra.McCrindle@mbie.govt.nz](mailto:Alexandra.McCrindle@mbie.govt.nz) | Telephone: +64 (04) 901 8364 Ext 48364  
15 Stout Street, Wellington 6011, PO Box 1473, Wellington 6140

**BUILDING  
PERFORMANCE**



New Zealand Government

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**From:** Corban Walls s 9(2)(a)  
**Sent:** Wednesday, 25 October 2017 9:56 p.m.  
**To:** Determinations  
**Cc:** Malcolm McCluskey  
**Subject:** Re: Request for information - Determination Island Bay (Ref 2975) [UNCLASSIFIED]

Hi Alexandra,

How are you?

I'm just following up on our determination application which is currently on hold. Council are taking their sweet time with processing our consent (49 weeks so far) and our lives have been seriously effected by this delay. I'm trying to find the right angle to take here and I was wondering if you can divulge any information



in regards to our determination? How far along is it? What is the outcome likely to be? I know this is a lot to ask but I have been messed around so much by council I just don't know which way to turn.

I look forward to hearing from you.

Thanks, Corban

s 9(2)(a)

Corban Walls

s 9(2)(a)

On 29/09/2017, at 9:19 AM, Determinations <[determinations@mbie.govt.nz](mailto:determinations@mbie.govt.nz)> wrote:

Dear Corban

As per your request below, we will put your application on hold.

Please inform us should anything change, we will contact you in one month to see if you would like to withdraw the application.

Kind regards  
Alexandra

**Alexandra McCrindle**

ADMINISTRATOR, DETERMINATIONS

Housing & Tenancy Services, Market Services  
Ministry of Business, Innovation & Employment  
*Hikina Whakatutuki - Lifting to Make Successful*

[Alexandra.McCrindle@mbie.govt.nz](mailto:Alexandra.McCrindle@mbie.govt.nz) | Telephone: + 64 (04) 901 8364 Ext 48364  
15 Stout Street, Wellington 6011, PO Box 1473, Wellington 6140

<image001.jpg>

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**From:** Corban Walls s 9(2)(a)

**Sent:** Thursday, 28 September 2017 8:52 p.m.

**To:** Malcolm McCluskey

**Cc:** Determinations

**Subject:** Re: Request for information - Determination Island Bay (Ref 2975) [UNCLASSIFIED]

Hi Malcolm,

Sorry for the delayed reply. I had a meeting with council yesterday and they have asked that I request that the determination processed is put on hold as they now believe they can process the consent without the determination process. I only submitted the determination application

out of frustration as I couldn't get responses from council. I now have two very proactive members of council working with me and things look very positive.

I hope this is okay?

Thanks, Corban



Corban Walls  
s 9(2)(a)

On 26/09/2017, at 4:44 PM, Malcolm McCluskey  
<[Malcolm.xxxxxxxxx@xxxxxxxxxxxxxxxxxxxx.xxxx.x](mailto:Malcolm.xxxxxxxxx@xxxxxxxxxxxxxxxxxxxx.xxxx.x)> wrote:

Dear Mr Walls

I have been unable to trace the hard copy application papers relating to this matter which you lodged at Council. Rather than wait longer, would you be so kind as to scan a complete copy of the application papers to me if it would not be too much trouble.

**Malcolm McCluskey | Senior Solicitor**  
**Civil Litigation, Legal Services**  
DDI 09 890 2967 | EXT (46) 2967 | Mob s 9(2)(a)  
Auckland Council, Level 11, 135 Albert Street, Auckland  
Private Bag 92300, Victoria St West, Auckland  
Visit our website: [www.aucklandcouncil.govt.nz](http://www.aucklandcouncil.govt.nz)

---

**From:** Corban Walls s 9(2)(a)  
**Sent:** Thursday, 21 September 2017 11:02 a.m.  
**To:** Determinations  
**Cc:** Malcolm McCluskey  
**Subject:** Re: Request for information - Determination Island Bay (Ref 2975) [UNCLASSIFIED]

Hi Alexandra,

I did sent through Part Two of the application to Mark Murray and Rob Woodger on the 22nd August so we'll just have to wait until they reply as I've already chased them multiple times.

Thanks, Corban

<image001.jpg>

Corban Walls  
s 9(2)(a)

On 21/09/2017, at 10:30 AM, Determinations  
<[determinations@mbie.govt.nz](mailto:determinations@mbie.govt.nz)> wrote:

Dear Corban

The applicant is responsible for sending the application through to the Council.

As part of making a determination, the Ministry is required to adhere to the principles of natural justice. This enables parties to make a submission at any time during the process. It is up to the Council to make a submission in response to the application, if they wish to.

Kind regards  
Alexandra

**Alexandra McCrindle**

ADMINISTRATOR, DETERMINATIONS

Housing & Tenancy Services, Market Services  
Ministry of Business, Innovation & Employment  
*Hikina Whakatutuki - Lifting to Make Successful*

[Alexandra.McCrindle@mbie.govt.nz](mailto:Alexandra.McCrindle@mbie.govt.nz) | Telephone: + 64 (04) 901 8364 Ext 48364  
15 Stout Street, Wellington 6011, PO Box 1473, Wellington 6140

<image002.jpg>

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**From:** Corban Walls s 9(2)(a)  
**Sent:** Tuesday, 19 September 2017 12:27 p.m.  
**To:** Determinations  
**Cc:** Malcolm McCluskey  
**Subject:** Re: Request for information - Determination Island Bay (Ref 2975)  
[UNCLASSIFIED]

Hi Alexandra,

Am I responsible for ensuring Council have responded Part Two of the application? I can't get responses from anyone at council and it's taking 4-5 to receive even an email response from them. They are of little help so I'm not sure how to get them to respond to this request?

Thanks, Corban

<image001.jpg>

Corban Walls  
s 9(2)(a)

On 19/09/2017, at 11:52 AM, Determinations  
<[determinations@mbie.govt.nz](mailto:determinations@mbie.govt.nz)> wrote:

Dear Corban

The draft determination is presently being written, it will take account the submissions received to date.

Please can Council acknowledge the application by completing Part Two of the application form and returning it to the Ministry, including any supporting submissions Council may wish to make.

Kind regards  
Alexandra

**Alexandra McCrindle**

ADMINISTRATOR, DETERMINATIONS

Housing & Tenancy Services, Market Services  
Ministry of Business, Innovation & Employment  
*Hikina Whakatutuki - Lifting to Make Successful*

[Alexandra.McCrindle@mbie.govt.nz](mailto:Alexandra.McCrindle@mbie.govt.nz) | Telephone: + 64 (04) 901 8364 Ext 48364

15 Stout Street, Wellington 6011, PO Box 1473, Wellington 6140

<image001.jpg>

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**From:** Corban Walls s 9(2)(a)

**Sent:** Monday, 18 September 2017 11:02 a.m.

**To:** Emma van den Eykel

**Cc:** Malcolm McCluskey; Determinations

**Subject:** Re: Request for information - Determination Island Bay (Ref 2975) [UNCLASSIFIED]

Hi Emma,

How are you? Just a quick email to see how things are progressing in regards to our Determination?

Thanks, Corban

<image002.jpg>

Corban Walls

s 9(2)(a)

On 5/09/2017, at 5:13 PM, Emma van den Eykel <[Emma.vandenEykel@mbie.govt.nz](mailto:Emma.vandenEykel@mbie.govt.nz)> wrote:

Hi Corban,

Thank you for supplying the requested information.

Kind regards,

**Emma van den Eykel**

ADVISOR DETERMINATIONS

Determinations | Housing and Tenancy Services | Market Services

Ministry of Business, Innovation & Employment  
Hikina Whakatutuki – Lifting to make successful

[Emma.vandenykel@mbie.govt.nz](mailto:Emma.vandenykel@mbie.govt.nz) | Telephone +64 4 901 8618  
15 Stout St, PO Box 1473, Wellington 6140  
<image001.jpg>

Please note: all correspondence relating to this determination should be addressed to [determinxxxxxx@xxxx.xxxl.nz](mailto:determinxxxxxx@xxxx.xxxl.nz) and copied to all parties involved.

---

**From:** Corban Walls

s 9(2)(a)

**Sent:** Tuesday, 5 September 2017 4:55 p.m.

**To:** Emma van den Eykel

**Subject:** Re: Request for information - Determination Island Bay (Ref 2975)  
[UNCLASSIFIED]

Hi Emma,

Thanks for your email. Please find the attached info as below:

- 4th August RFI letter responses (Folder 'RFI's 6')
- Emails on the 4th, 9th & 10th August 2017
- I have responded to the RFI's on the 21st August but have had no response (Folder 'RFI's 7')
- We have had water tightness testing done on the window joinery and

Viridian Glass have done the calculations for the glazing. The joinery is structurally supported by the structure of the building which our structural engineer has covered off in his design. We have provided everything they have asked for.

- The Dow Corning approval is effectively covered off in the Viridian Glass PS1. I have attached the email from them showing approval and supply of full warranty.

Please let me know if you need anything else.

I look forward to hearing from you.

Kind regards, Corban

<image002.jpg>

Corban Walls  
s 9(2)(a)

On 5/09/2017, at 4:29 PM,  
Emma van den Eykel  
<[Emma.vandenEykel@mbie.govt.nz](mailto:Emma.vandenEykel@mbie.govt.nz)> wrote:

Hi Corban,

We will shortly start writing the draft determination for 6 Island Bay Road.

Can you please provide the following information to assist with drafting the determination:

- The responses to the request for information letter dated 4 August 2017 (I note in the Council's letter dated 21 August 2017, it refers to two emails dated 9 and 10 August 2017).
- Any response to the request for information letter dated 21 August 2017 (I note the determination



application was submitted 23 August 2017, so we would like confirmation if there was no response).

- Any calculations and/or report submitted to the Council to support the compliance of the window joinery as an alternative solution.
- The “adhesive suppliers approval (Dow Corning)”, which is noted in your submission but we don’t appear to have received a copy of this document.

We look forward to receiving the information.

Kind regards,

**Emma van den Eykel**

ADVISOR DETERMINATIONS

Determinations | Housing and Tenancy Services | Market Services

Ministry of Business, Innovation & Employment

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[Emma.vandeneysel@mbie.govt.nz](mailto:Emma.vandeneysel@mbie.govt.nz) | Tel

ephone +64 4 901 8618

15 Stout St, PO Box 1473, Wellington 6140

<image001.jpg>

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RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

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**From:** Corban Walls s 9(2)(a)  
**Sent:** Tuesday, 31 October 2017 12:06 p.m.  
**To:** Determinations  
**Subject:** Re: Request for information - Determination Island Bay (Ref 2975) [UNCLASSIFIED]

Hi Alexandra,

Thanks for your email. Most the information you've outlined in your email is supplied but we can certainly clarify things if there's confusion.

In regards to the capacity of the aluminium angles supporting the glass; would you like me to have my engineer calculate the loads it can take? It'll most likely be 20-30 times the weight of the glass.

With regards to the glazing being considered as a fixed cladding element; given it's simplicity does this need to be tested considering I've already had watertightness testing performed.

I look forward to hearing from you.

Thanks, Corban

s 9(2)(a)

Corban Walls  
s 9(2)(a)

On 30/10/2017, at 12:36 PM, Determinations <[determinations@mbie.govt.nz](mailto:determinations@mbie.govt.nz)> wrote:

Dear Corban

The application has been placed on hold as requested, but in answer to your inquiry below it is considered that the consent application is lacking in some detail, such as verification of the capacity of the metal angles and fixings supporting the glass, a lack of clarity about the type of sealant used to hold the glass, the anticipated inter-storey deflection, and similar. We also do not consider the standard referred to by Council is the appropriate test for the glazing in this situation given the glass is a fixed cladding element.

Please let us know whether you wish to proceed with your application for determination, or if you wish for it to be kept on hold, or if you wish to withdraw it.

Kind regards  
Alexandra

**Alexandra McCrindle**

ADMINISTRATOR, DETERMINATIONS

Housing & Tenancy Services, Market Services  
Ministry of Business, Innovation & Employment  
*Hikina Whakatutuki - Lifting to Make Successful*

[Alexandra.McCrindle@mbie.govt.nz](mailto:Alexandra.McCrindle@mbie.govt.nz) | Telephone: + 64 (04) 901 8364 Ext 48364  
15 Stout Street, Wellington 6011, PO Box 1473, Wellington 6140

<image001.jpg>

---

**From:** Corban Walls s 9(2)(a)  
**Sent:** Wednesday, 25 October 2017 9:56 p.m.  
**To:** Determinations  
**Cc:** Malcolm McCluskey  
**Subject:** Re: Request for information - Determination Island Bay (Ref 2975) [UNCLASSIFIED]

Hi Alexandra,

How are you?

I'm just following up on our determination application which is currently on hold. Council are taking their sweet time with processing our consent (49 weeks so far) and our lives have been seriously effected by this delay. I'm trying to find the right angle to take here and I was wondering if you can divulge any information in regards to our determination? How far along is it? What is the outcome likely to be? I know this is a lot to ask but I have been messed around so much by council I just don't know which way to turn.

I look forward to hearing from you.

Thanks, Corban

<image002.jpg>

Corban Walls  
s 9(2)(a)

On 29/09/2017, at 9:19 AM, Determinations <[determinations@mbie.govt.nz](mailto:determinations@mbie.govt.nz)> wrote:

Dear Corban

As per your request below, we will put your application on hold.

Please inform us should anything change, we will contact you in one month to see if you would like to withdraw the application.

Kind regards  
Alexandra

**Alexandra McCrindle**

ADMINISTRATOR, DETERMINATIONS

Housing & Tenancy Services, Market Services  
Ministry of Business, Innovation & Employment  
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15 Stout Street, Wellington 6011, PO Box 1473, Wellington 6140

<image001.jpg>

---

**From:** Corban Walls s 9(2)(a)  
**Sent:** Thursday, 28 September 2017 8:52 p.m.  
**To:** Malcolm McCluskey  
**Cc:** Determinations  
**Subject:** Re: Request for information - Determination Island Bay (Ref 2975)  
[UNCLASSIFIED]

Hi Malcolm,

Sorry for the delayed reply. I had a meeting with council yesterday and they have asked that I request that the determination processed is put on hold as they now believe they can process the consent without the determination process. I only submitted the determination application out of frustration as I couldn't get responses from council. I now have two very proactive members of council working with me and things look very positive.

I hope this is okay?

Thanks, Corban



Corban Walls  
s 9(2)(a)

On 26/09/2017, at 4:44 PM, Malcolm McCluskey  
<[Malcolm.xxxxxxxxxx@xxxxxxxxxxxxxxxxxxxx.xxxx](mailto:Malcolm.xxxxxxxxxx@xxxxxxxxxxxxxxxxxxxx.xxxx)> wrote:

Dear Mr Walls

I have been unable to trace the hard copy application papers relating to this matter which you lodged at Council. Rather than wait longer, would you be so



kind as to scan a complete copy of the application papers to me if it would not be too much trouble.

**Malcolm McCluskey | Senior Solicitor  
Civil Litigation, Legal Services**

DDI 09 890 2967 | EXT (46) 2967 | Mob s 9(2)(a)  
Auckland Council, Level 11, 135 Albert Street, Auckland  
Private Bag 92300, Victoria St West, Auckland  
Visit our website: [www.aucklandcouncil.govt.nz](http://www.aucklandcouncil.govt.nz)

---

**From:** Corban Walls s 9(2)(a) ]  
**Sent:** Thursday, 21 September 2017 11:02 a.m.  
**To:** Determinations  
**Cc:** Malcolm McCluskey  
**Subject:** Re: Request for information - Determination Island Bay (Ref 2975)  
[UNCLASSIFIED]

Hi Alexandra,

I did sent through Part Two of the application to Mark Murray and Rob Woodger on the 22nd August so we'll just have to wait until they reply as I've already chased them multiple times.

Thanks, Corban

<image001.jpg>

Corban Walls  
s 9(2)(a)

On 21/09/2017, at 10:30 AM, Determinations  
<[determinations@mbie.govt.nz](mailto:determinations@mbie.govt.nz)> wrote:

Dear Corban

The applicant is responsible for sending the application through to the Council.

As part of making a determination, the Ministry is required to adhere to the principles of natural justice. This enables parties to make a submission at any time during the process. It is up to the Council to make a submission in response to the application, if they wish to.

Kind regards  
Alexandra

**Alexandra McCrindle**

ADMINISTRATOR, DETERMINATIONS

Housing & Tenancy Services, Market Services  
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15 Stout Street, Wellington 6011, PO Box 1473, Wellington 6140

<image002.jpg>

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**From:** Corban Walls s 9(2)(a)  
**Sent:** Tuesday, 19 September 2017 12:27 p.m.  
**To:** Determinations  
**Cc:** Malcolm McCluskey  
**Subject:** Re: Request for information - Determination Island Bay (Ref 2975) [UNCLASSIFIED]

Hi Alexandra,

Am I responsible for ensuring Council have responded Part Two of the application? I can't get responses from anyone at council and it's taking 4-5 to receive even an email response from them. They are of little help so I'm not sure how to get them to respond to this request?

Thanks, Corban

<image001.jpg>

Corban Walls  
s 9(2)(a)

On 19/09/2017, at 11:52 AM, Determinations  
<[determinations@mbie.govt.nz](mailto:determinations@mbie.govt.nz)> wrote:

Dear Corban

The draft determination is presently being written, it will take account the submissions received to date.

Please can Council acknowledge the application by completing Part Two of the application form and returning it to the Ministry, including any supporting submissions Council may wish to make.

Kind regards  
Alexandra

**Alexandra McCrindle**

ADMINISTRATOR, DETERMINATIONS

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Ministry of Business, Innovation & Employment  
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(04) 901 8364 Ext 48364  
15 Stout Street, Wellington 6011, PO Box 1473,  
Wellington 6140

<image001.jpg>

---

**From:** Corban Walls  
s 9(2)(a)  
**Sent:** Monday, 18 September 2017 11:02 a.m.  
**To:** Emma van den Eykel  
**Cc:** Malcolm McCluskey; Determinations  
**Subject:** Re: Request for information -  
Determination Island Bay (Ref 2975)  
[UNCLASSIFIED]

Hi Emma,

How are you? Just a quick email to see how things are progressing in regards to our Determination?

Thanks, Corban

<image002.jpg>

Corban Walls  
s 9(2)(a)

On 5/09/2017, at 5:13 PM,  
Emma van den Eykel  
<[Emma.vandenEykel@mbie.govt.nz](mailto:Emma.vandenEykel@mbie.govt.nz)> wrote:

Hi Corban,

Thank you for supplying the requested information.

Kind regards,

**Emma van den Eykel**

ADVISOR DETERMINATIONS

Determinations | Housing and Tenancy  
Services | Market Services

Ministry of Business, Innovation &  
Employment

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[Emma.vandeneysel@mbie.govt.nz](mailto:Emma.vandeneysel@mbie.govt.nz) | Tel

ephone +64 4 901 8618

15 Stout St, PO Box 1473, Wellington  
6140

<image001.jpg>

Please note: all correspondence  
relating to this determination should  
be addressed  
to [determinxxxxxx@xxxx.xxxt.nz](mailto:determinxxxxxx@xxxx.xxxt.nz) and  
copied to all parties involved.

---

**From:** Corban Walls  
s 9(2)(a)

**Sent:** Tuesday, 5 September 2017  
4:55 p.m.

**To:** Emma van den Eykel

**Subject:** Re: Request for  
information - Determination Island  
Bay (Ref 2975) [UNCLASSIFIED]

Hi Emma,

Thanks for your email. Please  
find the attached info as below:

- 4th August RFI letter responses (Folder 'RFI's 6')
- Emails on the 4th, 9th & 10th August 2017
- I have responded to the RFI's on the 21st August but have had no response (Folder 'RFI's 7')
- We have had water tightness testing done on the window joinery and Viridian Glass have done

the calculations for the glazing. The joinery is structurally supported by the structure of the building which our structural engineer has covered off in his design. We have provided everything they have asked for.

- The Dow Corning approval is effectively covered off in the Viridian Glass PS1. I have attached the email from them showing approval and supply of full warranty.

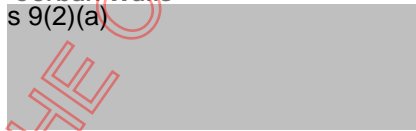
Please let me know if you need anything else.

I look forward to hearing from you.

Kind regards, Corban

<image002.jpg>

Corban Walls  
s 9(2)(a)



On 5/09/2017, at 4:29 PM, Emma van den Eykel <[Emma.vandenEykel@mbie.govt.nz](mailto:Emma.vandenEykel@mbie.govt.nz)> wrote:

Hi Corban,

We will shortly start writing the draft determination for 6 Island Bay Road.

Can you please provide the following

information to assist with drafting the determination:

- The responses to the request for information letter dated 4 August 2017 (I note in the Council's letter dated 21 August 2017, it refers to two emails dated 9 and 10 August 2017).
- Any response to the request for information letter dated 21 August 2017 (I note the determination application was submitted 23 August 2017, so we would like confirmation if there was no response).
- Any calculations and/or report submitted to the Council to support the compliance of the window joinery as an

alternative solution.

- The “adhesive suppliers approval (Dow Corning)”, which is noted in your submission but we don’t appear to have received a copy of this document.

We look forward to receiving the information.

Kind regards,

**Emma van den Eykel**

ADVISOR  
DETERMINATIONS  
Determinations |  
Housing and Tenancy  
Services | Market  
Services  
Ministry of Business,  
Innovation &  
Employment  
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[Emma.vandenykel@mbie.govt.nz](mailto:Emma.vandenykel@mbie.govt.nz) | Teleph  
one +64 4 901 8618  
15 Stout St, PO Box  
1473, Wellington  
6140

<image001.jpg>

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copied to all parties  
involved.

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**From:** Malcolm McCluskey <Malcolm.McCluskey@aucklandcouncil.govt.nz>  
**Sent:** Friday, 24 November 2017 12:21 p.m.  
**To:** Sue Brown  
**Cc:** s 9(2)(a)  
**Subject:** Draft determination for 6 Island Bay Road, Beach Haven, Auckland (Ref 2975)  
[UNCLASSIFIED]  
**Attachments:** SC654E0078417112412020.pdf; SC654E0078417112411520.pdf

Dear Ms Brown

Attached and below is Council's response to the Draft.

Council has accepted the Draft decision at paragraph 6.1, but would comment that there are a plethora of outstanding issues other than joinery which fall to be resolved. Attached is Council's letter to the Applicant dated 4/8/17 by way of illustration.

**Malcolm McCluskey | Senior Solicitor**  
**Civil Litigation, Legal Services**  
DDI 09 890 2967 | EXT (46) 2967 | Mob s 9(2)(a)  
Auckland Council, Level 11, 135 Albert Street, Auckland  
Private Bag 92300, Victoria St West, Auckland  
Visit our website: [www.aucklandcouncil.govt.nz](http://www.aucklandcouncil.govt.nz)



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# BUILDING PERFORMANCE

BUILDING.GOV.T.NZ

FREEPHONE 0800 24 22 43  
FROM OVERSEAS +64 4 238 6362

PO Box 1473  
Wellington 6140  
New Zealand

File ref: 2975

Administrator, Determinations  
Ministry of Business, Innovation and Employment  
P.O. Box 1473  
Wellington 6140

## Draft determination for 6 Island Bay Road, Beach Haven, Auckland

Please select one of the following options (tick the appropriate box ) before signing and returning this form.

- (a) The draft determination, dated 9 November 2017, is accepted and I have sent a copy of my response to the other parties.
- (b) The draft determination, dated 9 November 2017, is accepted subject to the attached non-contentious amendments and I have sent a copy of my amendments to the other parties.
- (c) The draft determination, dated 9 November 2017, is not accepted. I request that the determination acknowledge and take account the attached comments and I have sent a copy of my comments to the other parties.

If you have selected option b, or c, please:

- advise me of such amendments in writing, referring to specific clauses in the draft (where relevant).
- send a copy of your response and comments or amendments to the other parties.

Please return this form by 24 November 2017

Signed: *M. McCuskey* Date: *24/11/17*

(Print name here: *MARCOON MCCUSKEY*)

For and on behalf of: *AUCKLAND COUNCIL*



MINISTRY OF BUSINESS,  
INNOVATION & EMPLOYMENT  
HIRA WHAKATUTU

4 August 2017



Mr Coban Walls  
s 9(2)(a)

**Building consent number:**

BCO10030652-2

**Address:**

6 Island Bay Road, Beach Haven

**Description:**

RBW - Stage 2 - the construction of the two level, three bedroom dwelling with three car garage. this will include all above ground structure cladding, glazing and roofing, the roof deck over garage and hard landscaping. Takapuna / Graham Street Service Centre

**Area office:**

Dear Sir

Thank you for your patience regarding the building consent application at 6 Island Bay Road, Beach Haven.

Your proposal has a number of alternative materials and methods of construction, which can be more challenging and often take more time to understand how compliance will be achieved, than using more convention methods. That is not to say Council are anti-innovation, in fact quite the opposite, it's just at the end of the day, Council must be satisfied on reasonable grounds that if built per the consented documents, compliance will be achieved.

There are still a number of areas that need further explanation/clarity as follows

1. You have nominated X-lam floor and floor panels, but it is not clear as to the treatment level if any is proposed, and dependent on the answer to this, may raise other questions.
2. The aluminium joinery, which we have discussed, and I have subsequently discussed with my manager, remains a concern. Other than the AAMA field test for weathertightness, nothing else has been provided to demonstrate compliance. As explained, when using E2/AS1 for guidance, NZS 4211:2008 (Specification for performance of windows) is the testing standard referenced. Again this is not to say this is the only standard that can be used, however having said that, it is important to understand the NZS 4211 test is not just for weathertightness but includes other tests. Council need more information to be satisfied compliance will be achieved.
3. The use of Kingspan in the roof and ceiling as detailed is of concern. You have supplied three Kingspan manuals, and the Kingspan CodeMark (SAIG-

CM20104) for Kingspan KS1000RW. The CodeMark makes reference to a data sheet dated January 2016 (NZ version), which does not appear to have been provided. There is other material referred to in the CodeMark which also do not appear to have been provided either. Obviously it is not just a matter of providing the material, but also ensuring the relevant information within them reflects those within the application.

4. Also in relation to the Kingspan CodeMark, not all clauses of the Building Code are covered, therefore those code clauses that are appropriate to this application and not covered by the CodeMark need to be addressed.
5. Some of the detailing I have concerns with for example (not to be considered a complete list)  
Sheet S-10 detail 2 –
  - a. There is a fixing of the plywood forming the gutter fixed only into the PIR insulation,
  - b. What is the down turn of the cap flashing into the gutter.
  - c. It is unclear what the top bolt in the beam is doing.
  - d. It appears there is RAB to be attached over the Kingspan, how will this be attached?
  - e. There is an aluminium bracket only fixed into the Kingspan.
  - f. Is the cladding system based on a drain and ventilated cavity or a drained cavity.
  - g. Depending on the treatment level if any of the X-lam wall panels, are there any compatibility issues to be considered not only between the X-lam and the aluminium skin of the Kingspan, but in general.
6. The fixing of the weatherboards with 120mm long by 5.0 dia. nails and the location of the nails is not normal trade practice. The location of the fixings and size of the nails I am concerned will as the fixings will likely split the boards and also raise the issue of the ongoing weathertightness of the cladding itself.
7. The reliance of sealant as a primary means of weathertightness is not in Councils opinion best practice.
8. The entry roof, above the front door is lined with PIR insulation with TPO membrane. Can TPO be applied to PIR insulation?

The above is not to be considered a comprehensive list of all items that need addressing, but I think at this stage, it is fair to say Council are not in a position with the information provided, to be satisfied on reasonable grounds that compliance with the building code will be achieved and be able to issue the building consent.

I appreciate this is not the kind of news you were hoping for, but Council would be failing its statutory obligations under the Building Act if it were to issue the building consent based on the information provide to date.

Where to from here? With due respect to the designer, there is a lot more information and work required (possibly including testing) to be done to get it to the point a building consent can be issued. May I suggest having your proposal peer reviewed by a person with experience in alternative designs/solutions. Alternatively the option to apply for a determination directly to the Ministry of Innovation and Employment (MBIE) challenging our decision, refusing to issue the building consent, is also available. Information relating to determinations can be obtained from the MBIE web-site.

Finally, unless new information demonstrating compliance is received by Council within the next 28 days from the date of this correspondence, under section 50 of the Building Act 2004 your application will be refused.

Yours faithfully



Rob Woodger  
Team Leader Specialist Reclads  
Building Control

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982



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**From:** Corban Walls s 9(2)(a)  
**Sent:** Thursday, 1 February 2018 3:59 p.m.  
**To:** Malcolm McCluskey  
**Cc:** Ginny Carter; Sue Brown; Determinations  
**Subject:** Re: Draft determination for 6 Island Bay Road, Beach Haven, Auckland (Ref 2975)  
[UNCLASSIFIED]  
**Attachments:** Council Letter - 21st August.pdf

Hi Sue,

Please find attached the last RFI letter from council dated 21st August 2017, this letter does NOT demonstrate a 'plethora of outstanding issues' as mentioned by Malcolm McCluskey but rather five specific outstanding issues which were resolved prior to the consent application being refused. The letter dated 4th August 2017 was not the latest letter.

Please note that the issues in the letter dated 21st August were not formally resolved as Robert Woodger had taken long-term leave and never followed up. I would also like to point out that Auckland Council had our consent application on their desks for 235 days before refusing it and they only refused the consent because they knew they had failed to meet their responsibilities in the consenting process.

If you would like the time-line and break-down of the entire consent process please let me know.

Thanks, Corban

s 9(2)(a)

Corban Walls  
s 9(2)(a)

On 17/01/2018, at 4:43 PM, Malcolm McCluskey  
<[Malcolm.mcc@xx](mailto:Malcolm.mcc@xx)> wrote:

See Council's response to the Draft dated 24/11/17 below.

**Malcolm McCluskey | Senior Solicitor**  
**Civil Litigation, Legal Services**  
DDI 09 890 2967 | EXT (46) 2967 | Mob s 9(2)(a)  
Auckland Council, Level 11, 135 Albert Street, Auckland  
Private Bag 92300, Victoria St West, Auckland  
Visit our website: [www.aucklandcouncil.govt.nz](http://www.aucklandcouncil.govt.nz)

---

**From:** Malcolm McCluskey  
**Sent:** Friday, 8 December 2017 2:24 p.m.

**To:** Robert Woodger  
**Cc:** Danielle Greene  
**Subject:** FW: Draft determination for 6 Island Bay Road, Beach Haven, Auckland (Ref 2975)  
[UNCLASSIFIED]

For information.

**Malcolm McCluskey | Senior Solicitor**  
**Civil Litigation, Legal Services**  
DDI 09 890 2967 | EXT (46) 2967 | Mob s 9(2)(a)  
Auckland Council, Level 11, 135 Albert Street, Auckland  
Private Bag 92300, Victoria St West, Auckland  
Visit our website: [www.aucklandcouncil.govt.nz](http://www.aucklandcouncil.govt.nz)

---

**From:** Malcolm McCluskey  
**Sent:** Friday, 24 November 2017 12:21 p.m.  
**To:** 'Sue.Brown@mbie.govt.nz'  
**Cc:** s 9(2)(a)  
**Subject:** Draft determination for 6 Island Bay Road, Beach Haven, Auckland (Ref 2975)  
[UNCLASSIFIED]

Dear Ms Brown

Attached and below is Council's response to the Draft.

Council has accepted the Draft decision at paragraph 6.1, but would comment that there are a plethora of outstanding issues other than joinery which fall to be resolved. Attached is Council's letter to the Applicant dated 4/8/17 by way of illustration.

**Malcolm McCluskey | Senior Solicitor**  
**Civil Litigation, Legal Services**  
DDI 09 890 2967 | EXT (46) 2967 | Mob s 9(2)(a)  
Auckland Council, Level 11, 135 Albert Street, Auckland  
Private Bag 92300, Victoria St West, Auckland  
Visit our website: [www.aucklandcouncil.govt.nz](http://www.aucklandcouncil.govt.nz)



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<SC654E0078417112412020.pdf><SC654E0078417112411520.pdf>

21 August 2017

Mr C Walls

s 9(2)(a)

Dear Sir

**Building consent number:** BCO10030652-2  
**Address:** 6 Island Bay Road, Beach Haven  
**Description:** RBW - Stage 2 - the construction of the two level, three bedroom dwelling with three car garage. this will include all above ground structure cladding, glazing and roofing, the roof deck over garage and hard landscaping.  
**Area office:** Takapuna / Graham Street Service Centre

I have received your e-mails and attachments of the 9<sup>th</sup> and 10<sup>th</sup> August 2017

As outlined in my previous correspondence of the 4 August 17, you are proposing a number of alternative solutions, and as such demonstrating compliance with the building code in some instance can be quite involved. Again I reiterate Council are not anti-alternative solutions, but must be satisfied on reasonable grounds that if built per the issued building consent compliance will be achieved.

The items I had identified earlier were in no way a comprehensive list. To provide assistance I have responded to some of the information provided in your e-mail.

The X lam floor is noted as being treated to H1.2. Using NZS 3602: 2003 for guidance H1.2 raises other questions in and around wet areas.

The issue with the windows we have discussed a number of times. As Council do not have an expert in the field of window joinery testing there is no value in repeating the test for me or anyone else in Council for that matter. Furthermore testing of window joinery is not just about weathertightness. You may wish to consider the requirements of NZS 4211 for guidance.

Providing the latest Kingspan documentation including Codemark is a step in the right direction, but as previously stated the relevant information to allow the building to be built needs to be reflected on the plans. As far as the CodeMark goes what about those clauses of the Building Code that are not covered by the CodeMark, what will be provided to address them?

The building consent application documentation states 120x5.0 dia nails, now you are calling up 8g screws, the manufacturer may have approved this, but this does not demonstrate compliance with the Building Code, and what of the location of the fixings?

I have no issue with the TPO membrane, but does the CodeMark cover it being attached to PIR insulation?

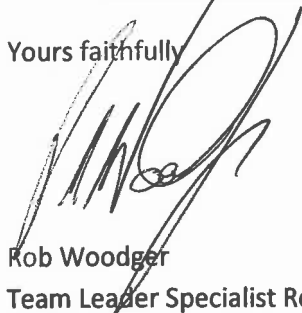
The designer is responsible for ensuring that the plans and specifications are sufficient to result in the building work complying with the Building Code, if it were properly completed in accordance with those plans and specifications. Council's role is to check and ensure that the application complies with the Building Code. Yes, it is not uncommon for Council to raise questions, but these should be fairly minor.

I am sorry, but the information provided to date is well short of Council's expectations in demonstrating compliance. Hence my recommendation to have the application peer reviewed, and obviously the determination option is still available.

I have extent the time for you to get this information together a further 28 days from today, as there is a fair amount of work required to get it to a point where a building consent can be issued.

As I will be on annual leave from the end of this week, any further correspondence relating to this matter should be addressed to Mark Murray. His e-mail address is [mark.murray@aucklandcouncil.govt.nz](mailto:mark.murray@aucklandcouncil.govt.nz).

Yours faithfully



Rob Woodger  
Team Leader Specialist Reclads  
Building Control

RELEASED UNDER THE OFFICIAL INFORMATION ACT 1982

---

**From:** Corban Walls s 9(2)(a)  
**Sent:** Thursday, 1 February 2018 5:23 p.m.  
**To:** Ginny Carter  
**Cc:** Malcolm.McCluskey@aucklandcouncil.govt.nz; Determinations; Sue Brown  
**Subject:** Re: Draft determination for 6 Island Bay Road, Beach Haven, Auckland (Ref 2975) [UNCLASSIFIED]  
**Attachments:** 20171212155029.pdf; ENG Island Bay Road Glazing signed.pdf; Glazing Eng Calcs.pdf; Island Bay Road - Full Final Set 13-12-17.pdf; PS1 - 6 Island Bay Rd Rev A.pdf; FLL Custom Test 1721 Special Projects.pdf; Island Bay Road House Maintenance Schedule.pdf

Hi Ginny,

In response to the draft determination I have provided and undertaken the following:

Following instruction from the Determination Draft I've had the fixed glazed cladding system tested accordingly, and undertaken the following testing in accordance with AS/NZS 4284 and E2/VM1. The structure has been checked by a structural engineer as being sufficient for this specific situation.

The testing concluded that there were no leaks in the glazing or aluminium framing. (see attached test report for details). The fixed glazing relies on two barriers of sealant to maintain watertightness, the primary weather seal and also the structural glazing sealant bead. The testing showed that even in the case of severe deterioration of the primary weather seal (holes were cut into the seal during testing) that there were still no leaks as the structural glazing sealant bead acted as a secondary defence against the ingress of water. The Dow Corning 795 sealant comes with a 20 year warranty on this specific project.

**Preconditioning Test: (PASSED)**

Apply a preconditioning loading to the external face of the test sample for a period of 1 minute of positive pressure, followed by a period of 1 minute of negative pressure (suction) at 1515 Pa.

**Series 1: Static Water Penetration (PASSED)**

Test pressure 455 Pa Duration 15 minutes

**Series 1: Cyclic Water Penetration (PASSED)**

Test pressure 455–910 Pa Duration 5 minutes

**Series 2: Water Management Tests Static Water Penetration (PASSED)** Test pressure 455 Pa Duration 15 minutes

We couldn't practically drill 6mm holes in the primary weather seal as it would've broken the glass so we cut 30x3mm holes in the seals to simulate seal degradation. A 6mm diameter hole has an area of 28mm<sup>2</sup> where as a 30x3mm rectangular hole has an area of 90mm<sup>2</sup>, over three times the required size.

**Series 2: Water Management Tests Cyclic Water Penetration (PASSED)** Test pressure 455–910 Pa Duration 5 minutes

**Series 3: Wetwall Test Static Water Penetration (NOT POSSIBLE)**

Test pressure 50 Pa Duration 15 minutes

As the glass cladding is comprised of fully sealed glass panels there is no wall underlay to remove to make this portion of the test possible. With a window system, any leaks will be evident as opposed to a cladding

system on timber framing, which can cause structural damage without any visible signs until it's well advanced.

Onsite Testing:

I also propose that a condition of this design is to undertake an AAMA 501.2 onsite water tightness testing after installation but before wall linings are installed to prove the system performance in this specific application. The onsite test is a quality assurance test to check everything has been installed correctly.

- Added a head flashing above all the glazing panels that have a fall of 15° and a minimum cover of 10mm to align with the Acceptable solutions of E2/AS1 and to add a 'mitigating feature'.
- Have amended the multitude of errors and inconsistencies across the consent drawings to clearly demonstrate the specific structural glazing adhesive and how it should be used.
- Provided accurate drawings showing the exact size of all the glazing members.
- Provided B1 calculations and a producer statement for the structure supporting the glazing including loading and fixing of the sill.
- Designed a maintenance schedule for the building to ensure it is maintained consistently and correctly
- Verified the design by undertaking E2/VM1 testing at FACADE LAB, an IAONZ Accredited facility.

Responses:

4.3.9 Compatibility testing is performed on material samples of the actual 'run' of material being used for this specific project. The test is undertaken to test the adhesion performance of the structural glazing sealant to the coating on the aluminium extrusion. To perform this test on any other material would be deemed pointless. This is industry standard practice for structural glazing.

4.3.10 I've since received design approval from Dow Corning and have had the PS1 updated to reflect this.

4.3.11 I've received confirmation from Dow Corning that the 795 Structural Glazing Sealant is suitable for use in wet areas and for use with the granite and stone tiles. I have highlighted these points within the Dow Corning 795 Product Specification. I have also clarified that the portion of 795 Sealant used to structurally hold the glass in place is distinctly different from the 795 sealant used to seal the tile even though they are the same product they serve different purposes in this application.

Please find attached documentation.

I look forward to hearing from you.

Thanks, Corban

s 9(2)(a)

Corban Walls

s 9(2)(a)

On 17/01/2018, at 11:32 AM, Ginny Carter <[Ginny.Carter@mbie.govt.nz](mailto:Ginny.Carter@mbie.govt.nz)> wrote:

Dear All

The draft determination was sent to you on 10 November 2017, as attached. We asked for the response sheet to be completed and returned by the 24 November 2017. To date, we do not appear to have received a response from you.

We appreciate you may have overlooked the earlier request, so I have enclosed a response sheet and extended the due date to 2 February 2018. Please respond before this date.

If you cannot make this deadline, please contact the Determinations team on 0800 242 243 or [determinations@mbie.govt.nz](mailto:determinations@mbie.govt.nz).

Yours sincerely

**Ginny Carter**

ADMINISTRATOR, DETERMINATIONS

Housing & Tenancy Services, Market Services  
Ministry of Business, Innovation & Employment  
*Hikina Whakatutuki - Lifting to Make Successful*

[xxxxx.xxxxxx@xxxx.xxxx.xx](mailto:xxxxx.xxxxxx@xxxx.xxxx.xx) |  
15 Stout Street, Wellington 6011

<image001.jpg>

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<20180117 F1 response form .docx><Mail Attachment.eml>





Building Code Clause(s).....B1 & B2\*

PRODUCER STATEMENT – PS1 – DESIGN

(Guidance notes on the use of this form are printed on page 2)

Our Ref:- 2003/004/H

ISSUED BY:.....Jackson Clapperton & Partners Ltd.....
(Design Firm)

TO:.....Alexandra & Corban Walls.....
(Owner/Developer)

TO BE SUPPLIED TO:.....Auckland Council.....
(Building Consent Authority)

IN RESPECT OF:.....Window Fixings & Supports New Dwelling (Stage 2).....
(Description of Building Work)

AT:.....6 Island Bay Road, Birkdale, Auckland, 0626.....
(Address)

.....LOT 3 DP 194346 SO.....

We have been engaged by the owner/developer referred to above to provide structural engineering design services in respect of the requirements of
(Extent of Engagement)

Clause(s) .....B1 & B2\*.....(\* only those elements covered by our design).....of the Building Code for All or Part only (as specified below), of the proposed building work.

- 1. Window mullions, fixings, window frame fixings.

The design carried out by us has been prepared in accordance with:

- [X] Compliance Documents issued by the Ministry of Business, Innovation & Employment.....B1/MM1, B1/AS1.....or (verification method / acceptable solution)
[ ] Alternative solution as per the attached schedule.....

The proposed building work covered by this producer statement is described on the drawings titled .....

.....Island Bay Road House.....and numbered .....Ref 201504 sheets A1-401, S-18, A4-202 to 204 together with the specification, and other documents set out in the schedule attached to this statement.

On behalf of the Design Firm, and subject to:

- (i) Site verification of the following design assumptions: Loads to AS/NZS1170
(ii) All proprietary products meeting their performance specification requirements;

I believe on reasonable grounds that a) the building, if constructed in accordance with the drawings, specifications, and other documents provided or listed in the attached schedule, will comply with the relevant provisions of the Building Code and that b), the persons who have undertaken the design have the necessary competency to do so. I also recommend the following level of construction monitoring/observation:

[ ] CM1 [X] CM2 [ ] CM3 [ ] CM4 [ ] CM5 (Engineering Categories) Or [ ] as per agreement with owner/developer (Architectural)

I, .....s 9(2)(a)..... am: [ ] CPEng .....7518.....#
(Name of Design Professional)
(Approved Author no. 1037) [ ] Reg Arch ..... #

I am a Member of : [X] IPENZ [ ] NZIA and hold the following qualifications:.....BE, MIPENZ, CPEng.....
The Design Firm issuing this statement holds a current policy of Professional Indemnity Insurance no less than \$200,000\*.

The Design Firm is a member of ACENZ: [X]

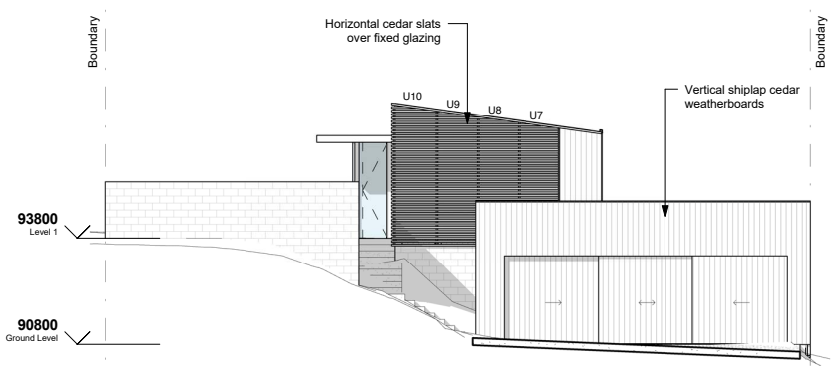
SIGNED BY .....s 9(2)(a)..... ON BEHALF OF Jackson Clapperton & Partners Ltd.....
(Design Firm)

Date.....12/12/2017..... (signature).....

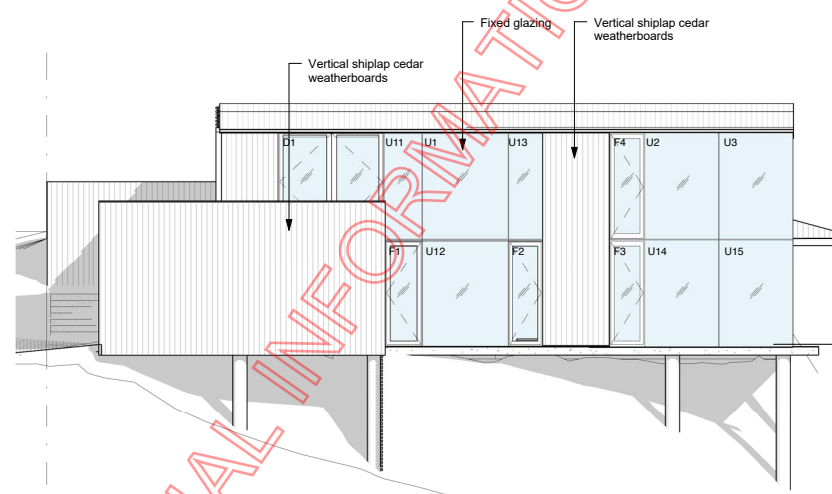
Note: This statement shall only be relied upon by the Building Consent Authority named above. Liability under this statement accrues to the Design Firm only. The total maximum amount of damages payable arising from this statement and all other statements provided to the Building Consent Authority in relation to this building work, whether in contract, tort or otherwise (including negligence), is limited to the sum of \$200,000\*.

This form is to accompany Form 2 of the Building (Forms) Regulations 2004 for the application of a Building Consent.

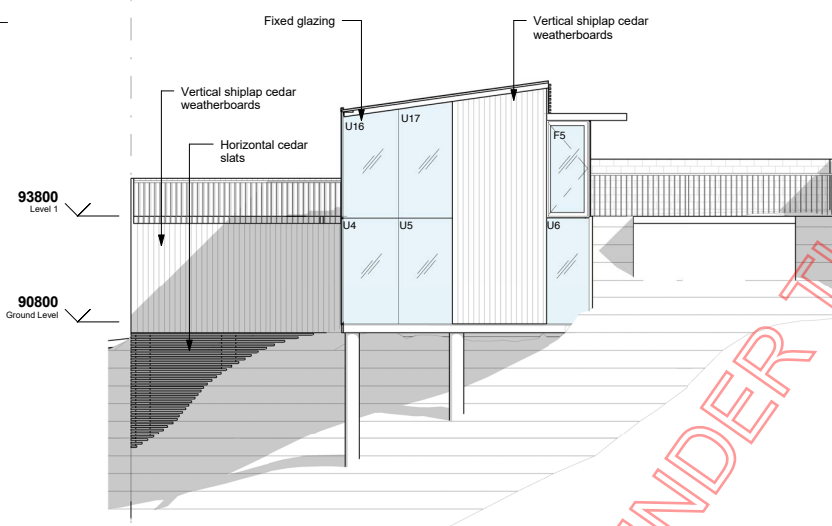
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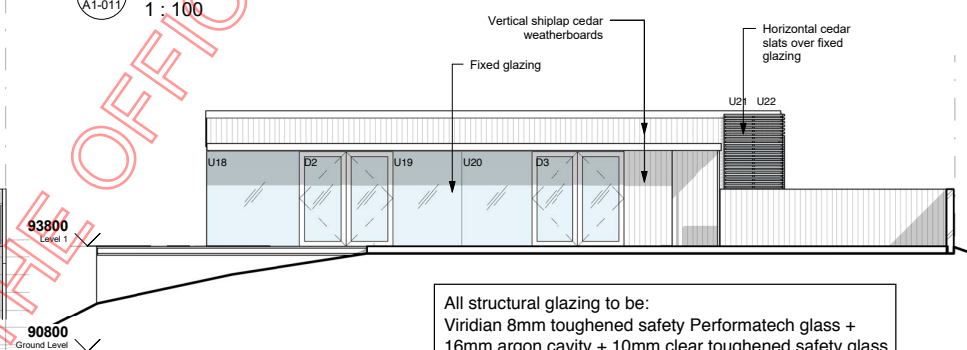
1 North West Elevation  
A1-011 1 : 100



2 South West Elevation  
A1-011 1 : 100



3 South East Elevation  
A1-011 1 : 100



4 North East Elevation  
A1-011 1 : 100

All structural glazing to be:  
Viridian 8mm toughened safety Performatech glass +  
16mm argon cavity + 10mm clear toughened safety glass

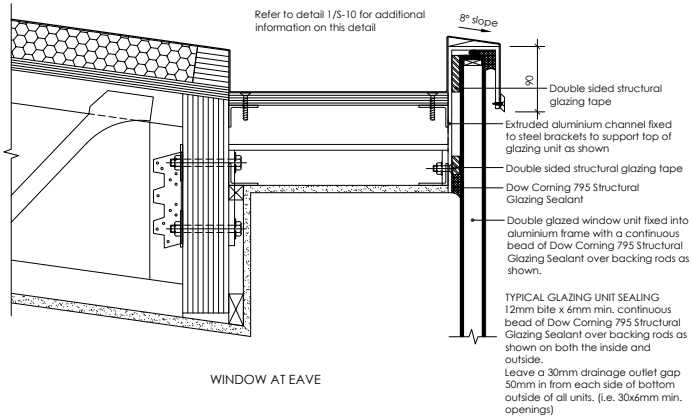
JACKSON CLAPPERTON & PARTNERS  
I hereby certify that structural details shown  
on this drawing, which are the subject of  
calculations made in our office and numbered  
Ref. 2003/004/H have been prepared in  
accordance with those calculations.

Signed: *[Signature]* Date: 12/12/2017

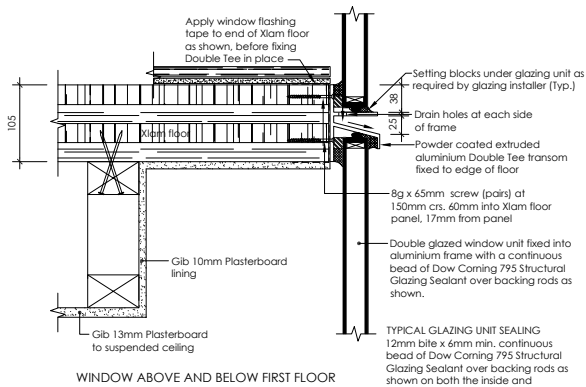
*[Signature]*

LOCAL AUTHORITY CONSULTANTS
NOTES:
REVISION HISTORY:
<p>s 9(2)(a)</p>
<p>PROJECT: No: 201504 ISLAND BAY ROAD HOUSE 6 Island Bay Road, Beach Haven</p>
<p>SHEET: Elevations</p>
<p>SCALES @ A2: 1 : 100 SCALES @ A4: Half A2 scale</p>
<p>REP: DRAWN/START DATE: Author</p>
<p>DRWG No: A1-401 REVISION:</p>
<p>DO NOT SCALE CONTRACTOR MUST VERIFY ALL DIMENSIONS ON SITE BEFORE COMMENCING WORK</p>
<p>COPYRIGHT © s 9(2)(a) 07-Dec-17 5:42:09 PM</p>

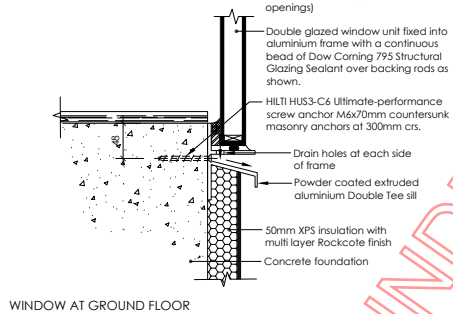
BUILDING CONSENT



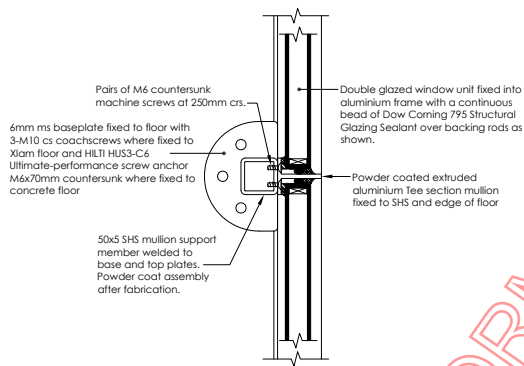
WINDOW AT EAVE



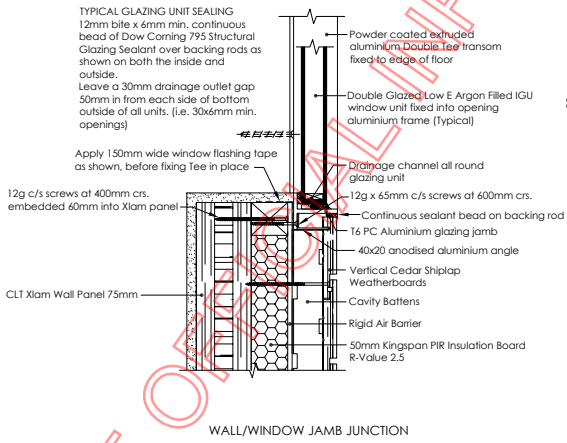
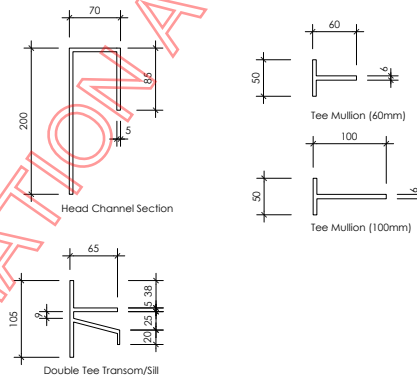
WINDOW ABOVE AND BELOW FIRST FLOOR



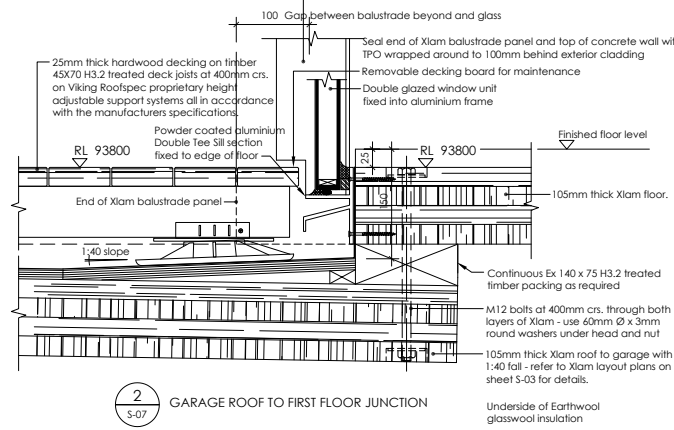
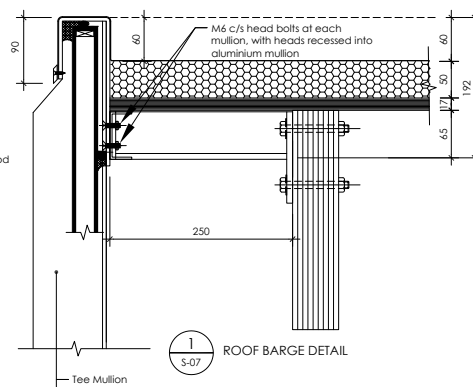
WINDOW AT GROUND FLOOR



MULLION SECTION



WALL/WINDOW JAMB JUNCTION



JACKSON CLAPPERTON & PARTNERS  
hereby certify that structural details shown on this drawing, which are the subject of calculations made in our office and numbered Ref. 2003/004/H..... have been prepared in accordance with those calculations.

Signed: [Signature] Date: 12/12/2017

TYPICAL FIXED GLAZING WINDOW DETAILS SCALE 1:5 @ A2

LOCAL AUTHORITY:  
AUCKLAND CITY COUNCIL

CONSULTANT:  
S 9(2)  
Jackson Clapperton & Partners Ltd  
PO Box 71 065 Rosebank Road  
ph (09) 8200131  
cell

NOTES:

REVISION HISTORY:

S 9(2)(a)

PROJECT: No: 201504  
ISLAND BAY ROAD HOUSE

6 Island Bay Road  
Beach Haven  
AUCKLAND

SHEET:  
FIXED WINDOW DETAILS

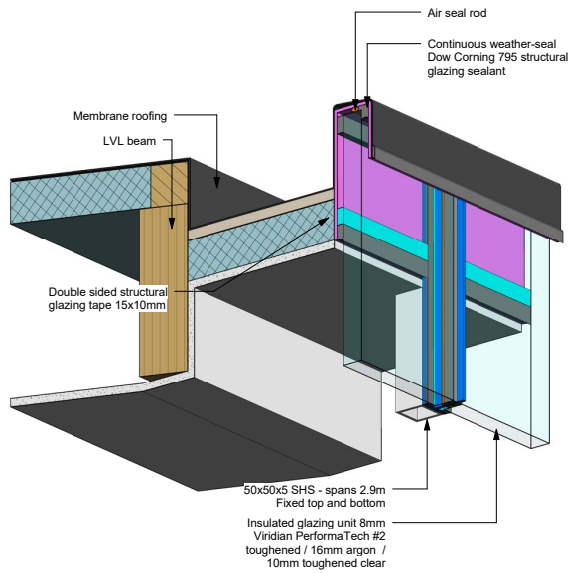
SCALES @ A2:  
SCALES @ A4: Half A2 scale

REF:  
DRAWN/START DATE: Author

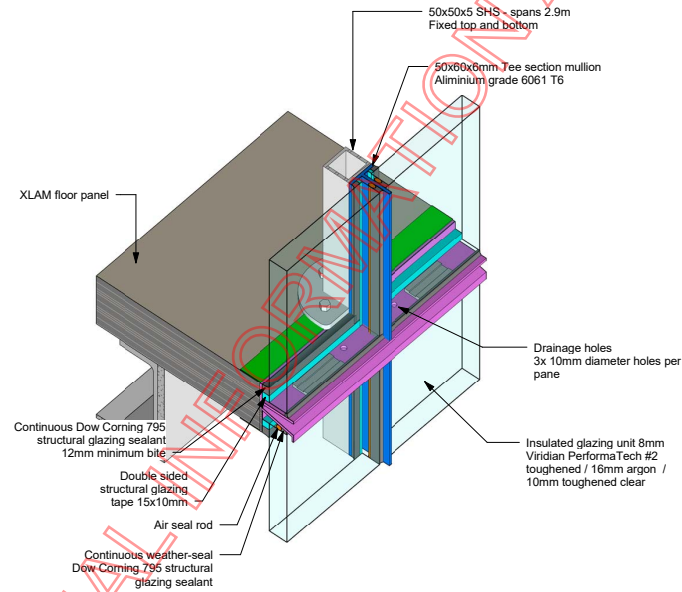
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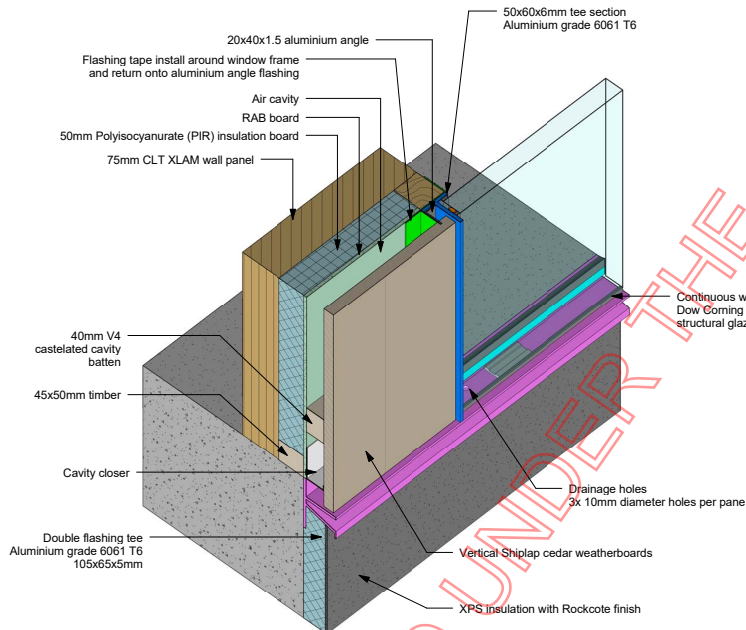
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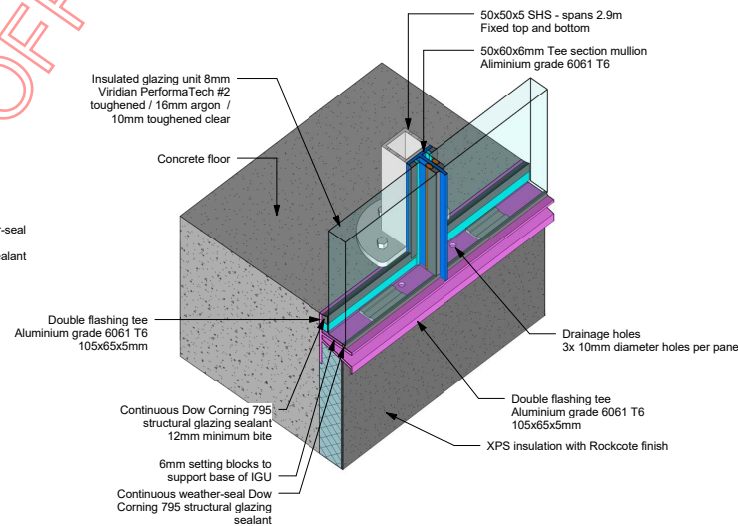
3  
Typical Glazing Head Isometric Detail



1  
Typical Glazing Isometric Detail



2  
Typical Glazing to Wall Panel Isometric Detail



4  
Typical Glazing Sill Isometric Detail

LOCAL AUTHORITY

CONSULTANTS

NOTES:

JACKSON CLAPPERTON & PARTNERS  
I hereby certify that structural details shown on this drawing which are the subject of calculations made in our office and numbered Ref. 2003/004/ have been prepared in accordance with those calculations.

Signed: *[Signature]* Date: 12/12/2017

REVISION HISTORY:

s 9(2)(a)

PROJECT: No: 201504

ISLAND BAY ROAD HOUSE

6 Island Bay Road, Beach Haven

SHEET:

Typical Glazing Details

SCALES @ A2:

SCALES @ A4: Half A2 scale

REF:

DRAWN/START DATE: Author

DRWG No:

REVISION:

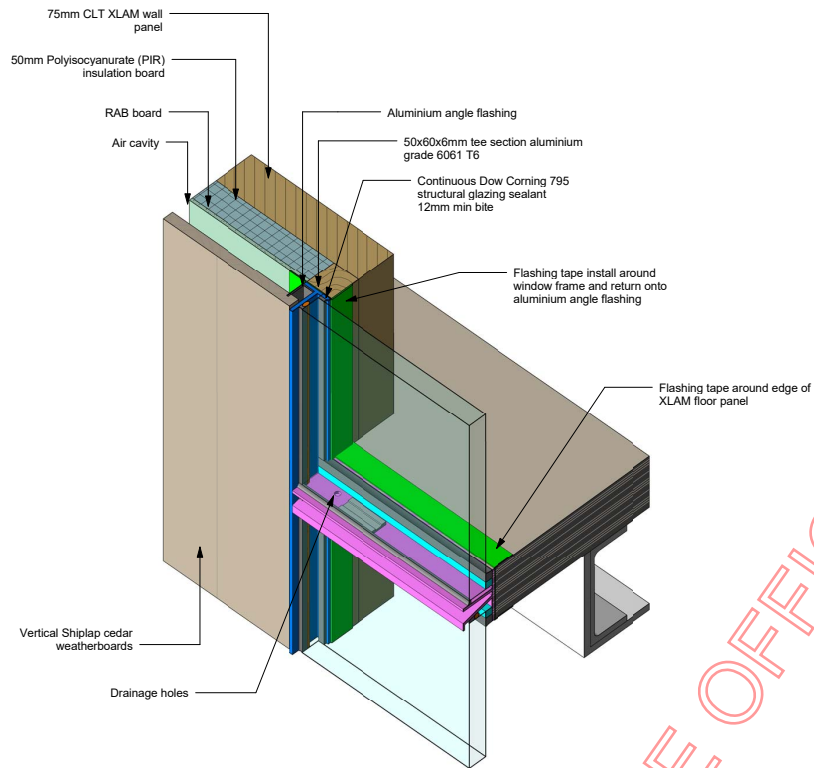
A4-202

DO NOT SCALE CONTRACTOR MUST VERIFY ALL DIMENSIONS ON SITE BEFORE COMMENCING WORK

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07-Dec-17 5:42:14 PM

BUILDING CONSENT



1 Typical Glazing to Wall Panel  
Isometric Detail at Midfloor

BASED UNDER THE OFFICIAL INFORMATION ACT

JACKSON CLAPPERTON & PARTNERS  
I hereby certify that structural details shown on this drawing which are the subject of calculations made in our office and numbered Ref. 2003/004/H have been prepared in accordance with those calculations.

Signed: *[Signature]* Date: 12/12/2017

*[Signature]*

LOCAL AUTHORITY

CONSULTANTS

NOTES:

REVISION HISTORY:

s 9(2)(a)

PROJECT: No: 201504  
ISLAND BAY ROAD HOUSE

6 Island Bay Road, Beach Haven

SHEET:  
Typical Glazing Details - Sheet 2

SCALES @ A2:  
SCALES @ A4: Half A2 scale

REF:  
DRAWN/START DATE: Author

DRWG No: A4-203 REVISION:

DO NOT SCALE  
CONTRACTOR MUST VERIFY ALL DIMENSIONS ON SITE BEFORE COMMENCING WORK

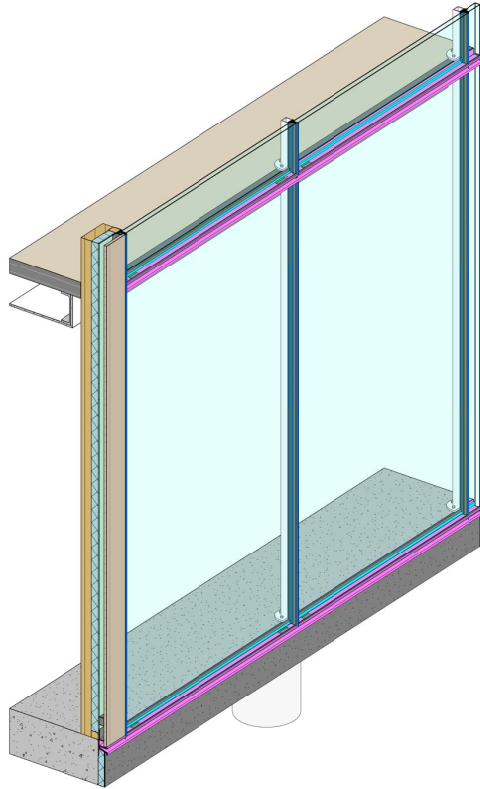
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BUILDING CONSENT

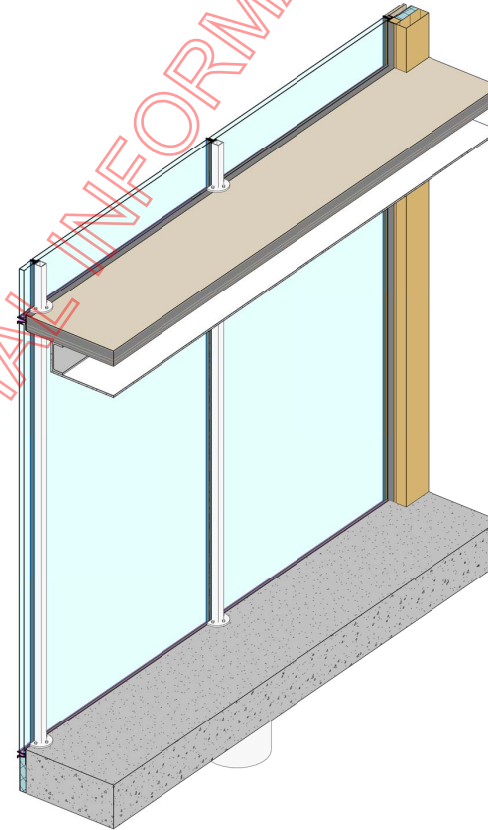


JACKSON CLAPPERTON & PARTNERS  
 I hereby certify that structural details shown  
 on this drawing, which are the subject of  
 calculations made in our office and numbered  
 Ref. 2003/004/H have been prepared in  
 accordance with those calculations.

Signed: *[Signature]* Date: 12/12/2017



1 Typical Glazing Panels - 3D



2 Typical Glazing Panels - 3D  
 Interior

LOCAL AUTHORITY
CONSULTANTS
NOTES:
REVISION HISTORY:
<p>s 9(2)(a)</p>
<p>PROJECT: No: 201504  <b>ISLAND BAY ROAD HOUSE</b>          6 Island Bay Road, Beach Haven</p>
<p>SHEET:  <b>Typical Glazing Details - Sheet 3</b></p>
<p>SCALES @ A2:          SCALES @ A4: Half A2 scale</p>
<p>REF:          DRAWN/START DATE: Author</p>
<p>DRWG No: <b>A4-204</b> REVISION:</p>
<p>DO NOT SCALE          CONTRACTOR MUST VERIFY ALL DIMENSIONS ON SITE BEFORE COMMENCING WORK</p>
<p>COPYRIGHT © s 9(2)(a)          _07-Dec-17 5:42:25 PM</p>

BUILDING CONSENT

**Report No. 17-21**

## Testing of Sample Window: 6 Island Bay Road Project

**Client:** Corban Walls

**Project:** 6 Island Bay Road

**Specifier:** s 9(2)(a)

**Test date:** 27 & 28 November 2017

**People present** s 9(2)(a) Managing Director, FaçadeLab  
Corban Walls, Specifier

**Test facility:** FaçadeLab Limited  
320 Rosedale Rd  
Albany  
Auckland

**Note:** This test was performed on the glazing seals of the sample provided to E2/VM1 parts 1.4.1, 1.4.2 and 1.4.3 with the sequence repeated after removal of parts of the external glazing seals and then inner glazing seal as per ASNZS4284:2008 part 8.10 Seal Degradation test.

Tested by: s 9(2)(a)

Checked by: JLG



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- Figure 6 – Pane 1, Interior Glazing Seal
- Figure 7 – Panes 1 & 2, with Interior Seals removed during testing



Figure 1: View of wet side of sample panel

Tested by: s 9(2)(a)

Checked by: JLG

## Description:

The sample was provided and installed as pictured, it comprised of 4 window panes in a frame approx. 710mm wide by 970mm high. For the purposes of the test only the window was tested, not the cladding junctions at the head, sill or jambs although these areas were exposed during the test. For the purposes of this test Pane 1 is identified as the top right pane of glass when viewed from the wet side of the sample. Pane 2 is the top left.



Figure 2: Close up view of wet side of sample panel

The test window comprised of aluminum frames with four double glazed panels.

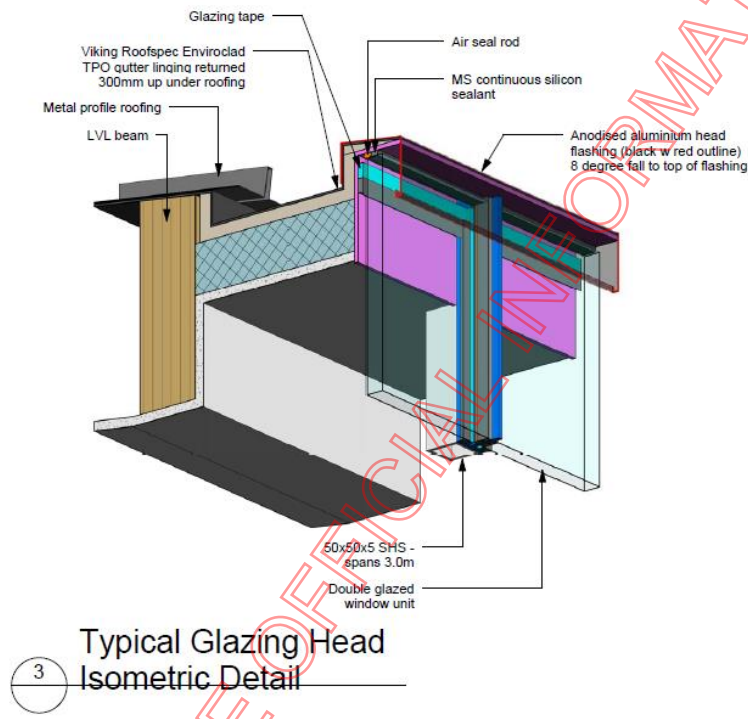
Tested by: s 9(2)(a)

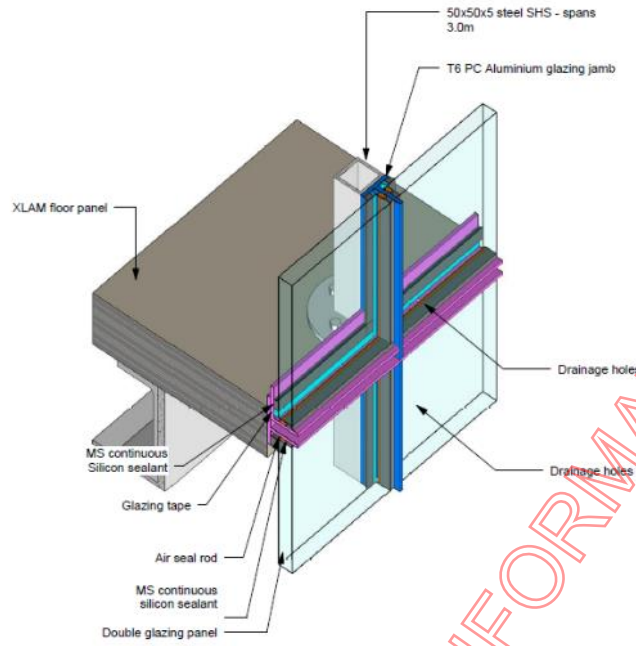
Checked by: JLG

Materials list provided by the client:

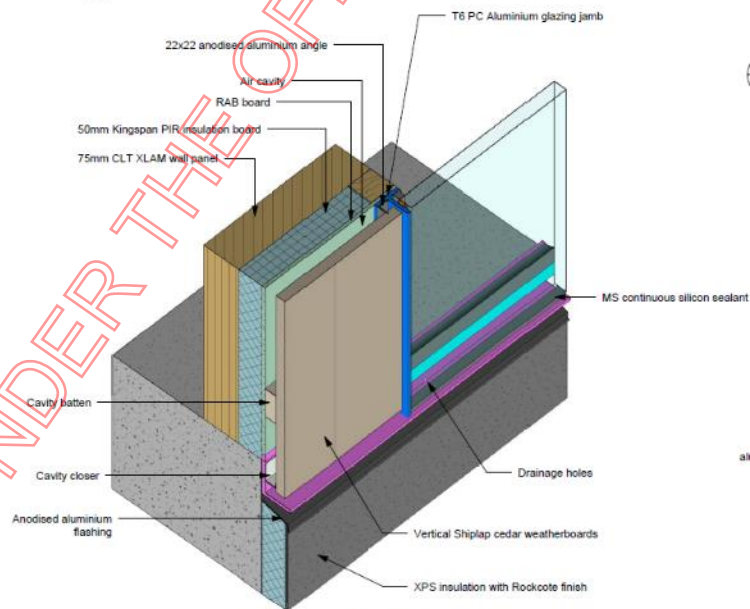
- 50x50x5mm Tee Mullions
- 100x50x5mm Double Tee Transom (at mid floor)
- 50x50x5mm Angle Head Frame with 90mm head flashing
- IGU's 5x12x5 fixed with 10x6mm structural glazing tape and 10x6mm bite Dow Corning 795 structural glazing sealant bead with Dow Corning 795 primary weather seal

Details from full scale drawing follows:





1 Typical Glazing Isometric Detail



2 Typical Glazing to Wall Panel Isometric Detail